



CM/GC

CONSTRUCTION MANAGER / GENERAL CONTRACTOR

***CM/GC PROCUREMENT
GUIDANCE DOCUMENT***

for the
**WALK BRIDGE PROJECT
PROJECT NO. 0301-0092**

DECEMBER 23, 2014



Construction Manager/General Contractor

WALK BRIDGE PROJECT CM/GC Procurement Manual

Table of Contents

1.	PURPOSE	1
1.01	CM/GC BACKGROUND AND SELECTION PROCESS - EXECUTIVE SUMMARY	2
1.02	WALK BRIDGE PROJECT DESCRIPTION	3
1.03	CONNDOT'S GOALS FOR THE WALK BRIDGE PROJECT:.....	4
1.04	MAJOR ELEMENTS OF CM/GC PROGRAM	5
1.05	DEFINITIONS.....	7
1.06	GENERAL OVERVIEW OF CM/GC RESPONSIBILITY AND PROJECT DELIVERY	15
1.07	CONFIDENTIALITY STATEMENTS/CONFLICT OF INTEREST	17
1.08	TIME OF PERFORMANCE REQUIREMENTS	18
1.09	SELECTION COMMITTEE	18
2.	DETAILED DESCRIPTION OF EVALUATION AND SELECTION OF THE SUCCESSFUL CM/GC.....	19
2.01	SUMMARY - EVALUATION AND SELECTION OF THE CM/GC	19
2.02	CM/GC ADVERTISEMENT.....	20
2.03	REQUESTS FOR QUALIFICATIONS (RFQ)	20
2.04	STATEMENT OF QUALIFICATION (SOQ) SUBMISSION REQUIREMENTS	21
2.05	MANDATORY DISCLOSURE FORMS.....	22
2.06	EVALUATION CRITERIA FOR STATEMENTS OF QUALIFICATIONS (SOQ)	22
2.07	REQUEST FOR PROPOSALS (RFP)	22
2.08	PRESUBMITTAL CONFERENCE FOR THE REQUEST FOR PROPOSAL	23
2.09	TECHNICAL PROPOSAL.....	24
2.10	TECHNICAL PROPOSAL EVALUATION PROCESS AND CRITERIA	24
2.11	PRICE COMPONENT OF THE RFP	25
2.12	CM/GC INTERVIEWS.....	25
2.13	RECOMMENDATION OF CONTRACTOR	25
3.	ANTICIPATED PRE-CONSTRUCTION SERVICES (DURING DESIGN)	27
3.01	OVERVIEW OF PRE-CONSTRUCTION SERVICES.....	27
3.02	AWARD OF PRE-CONSTRUCTION SERVICES AND GMP	28
3.03	PRE-CONSTRUCTION FEE	29
3.04	PRELIMINARY EVALUATION (DESIGN PHASE COOPERATION, COORDINATION, AND COMMUNICATION)	30
3.05	CM/GC'S PERFORMANCE AND LIMITATIONS	30
3.06	ADDITIONAL SUPPORT SERVICES.....	31
3.07	CM/GC HARMONY/ COLLABORATION	31
3.08	SUBCONTRACTING – INCLUDING AA/EEO AND DBE	31
3.09	CHANGES TO THE CM/GC TEAM	32
3.10	VALUE ENGINEERING (VE)	32
3.11	RISK ANALYSIS.....	32
3.12	INDEPENDENT COST ESTIMATE	33
3.13	ENGINEERS ESTIMATE	34
3.14	ESTIMATOR CALIBRATION MEETINGS.....	34

3.15	COORDINATION WITH THE DESIGN CONSULTANT AND THE PROJECT MANAGER	34
3.16	CONTRACTOR REVIEWS	35
3.17	NOTIFICATION OF VARIANCE OR DEFICIENCY	36
3.18	ALTERNATIVE EVALUATIONS / OPTIONS ANALYSIS – PRIOR TO GMP	36
3.19	PROJECT MEETINGS	36
3.20	“OVER-THE-SHOULDER” REVIEWS	37
3.21	LONG LEAD ITEMS / SYSTEM PROCUREMENTS	37
3.22	CONSTRUCTION MANAGEMENT PLAN	37
3.23	PROJECT SCHEDULE	38
3.24	DOCUMENT CONTROL	39
3.25	TEAM PARTNERING	39
3.26	PREPARATION OF GUARANTEED MAXIMUM PRICE (GMP) PROPOSALS	39
3.27	MULTIPLE GMPs	40
3.28	EXTRA WORK ORDERS / AMENDMENTS TO THE GMP	41
3.29	UNSUCCESSFUL GMP NEGOTIATION	41
3.30	CONTINGENCY	42
3.31	NOTICE PROVISIONS	43
3.32	PRELIMINARY GMP SCHEDULE	43
3.33	COST ESTIMATES AND ESTIMATE CALIBRATION MEETINGS	43
3.34	CONFIDENTIALITY OF COST MODEL AND GMP DOCUMENTATION	45
3.35	NON-COLLUSION	45
4.	ANTICIPATED CONSTRUCTION ADMINISTRATION SERVICES	46
4.01	CONSTRUCTION PHASE	46
4.02	SUBCONTRACTORS	47
4.03	SELF-PERFORMANCE BY THE CM/GC	47
4.04	CHANGE ORDERS AND TIME EXTENSIONS	47
4.05	COMPENSATION	48
4.06	MEASUREMENT AND PAYMENT	48
4.07	CONTRACTOR AND SUBCONTRACTOR RECORDS	48
4.08	CONTRACT TERMINATION OR SUSPENSION	49

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1. PURPOSE

The purpose of the CM/GC Procurement Guidance Document is to outline the Connecticut Department of Transportation (ConnDOT)'s general process for procuring and administering the Walk Bridge Project through the utilization of the Construction Manager/General Contractor (CM/GC) project delivery method. Even though CM/GC is used by many states, this document communicates the key aspects of ConnDOT's version of CM/GC to the construction industry, the design community, and other stakeholders. The Guidance Document also provides a general outline for the internal ConnDOT staff for their use in the procurement of the Construction Manager/General Contractor.

Many of the procedures and concepts that ConnDOT has chosen, as part of this CM/GC process, have been developed utilizing ConnDOT's Design/Build processes, as well as CM/GC concepts and options from the National Cooperative Highway Research Program (NCHRP) Synthesis #402 for Highway Programs, as well as thorough discussions with other state transportation agencies. Reference:

http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_syn_402.pdf.

The CM/GC method offers many potential benefits including shorter overall project completion duration, improved risk identification and mitigation responses, increased utilization of innovation design/construction techniques, and improved construction conflict identification and management.

This CM/GC Procurement Guidance Document is intended to provide information only; it should not be considered a contractual document. This information is provided in advance of the formal procurement documents (RFQ and RFP described below); those documents take precedence over this document. In addition, during the formal procurement process, ConnDOT may elect to revise any policies described herein.

ConnDOT welcomes questions or comments from interested parties. All questions or comments should be directed to: DOTWALKBRIDGE@CT.GOV

1.01 CM/GC BACKGROUND AND SELECTION PROCESS - EXECUTIVE SUMMARY

BACKGROUND: The CM/GC project delivery method is an integrated team approach to the planning, design, and construction of a project. The delivery method incorporates procedures to better control the schedule, budget, and quality. The CM/GC method has been developed as a result of public owner demands to enhance quality, decrease cost, compress the delivery period, and better plan for and manage risks. As different from the traditional Design/Bid/Build process, in CM/GC project delivery, the successful Contractor will work closely with the ConnDOT design team during the design (pre-construction) phase, but ConnDOT's Designer will remain as the Engineer of Record. In addition, ConnDOT will separately provide a Project Management Consultant and an Independent Cost Estimator (ICE) to assist in this project delivery process.

ConnDOT will select a CM/GC Contractor (hereinafter referred to as "Contractor") to provide both pre-construction phase and construction phase expertise. During the design phase, the Contractor will provide services such as plan reviews for constructability, pricing, scheduling, staging methods, efficiency, material procurement strategies, risk identification/management, and other areas related to the construction of the project. As the design approaches completion, ConnDOT and the CM/GC will negotiate the price for the work (using a price estimate set by the ICE to measure against). The selected Contractor will provide the qualifications and skills required for a general contractor, to eventually construct the Walk Bridge Project. The CM/GC will not proceed into construction unless ConnDOT agrees that the price provided, as part of an agreement to complete the project, or a portion of the project, (and independently evaluated) is fair, reasonable, and defensible. Please note that should ConnDOT and the Contractor's GMP negotiations not be successful, ConnDOT reserves its right to cancel the agreement with the Contractor, and the parties will follow the ConnDOT standards for discontinuance of work, including the transfer of in-process fabricated materials. If ConnDOT elects this measure, ConnDOT will re-procure the work, and the Contractor will be ineligible to bid on that work. Once the construction NTP is issued, the CM/GC will perform the traditional role of a general contractor. ConnDOT expects that the CM/GC contract will be made up of three parts: a Master Agreement that outlines the general terms and expectations of the Contractor and ConnDOT, but without specific scope or compensation provisions; a Pre-construction Services Agreement that covers the scope of work to be provided in the pre-construction phase, and compensation for that work, which will be similar to a professional services contract; and a Construction Contract that covers the construction work to be performed, with compensation for that work in accordance with the GMP or Interim GMP, which will be similar to a ConnDOT construction contract.

ConnDOT is seeking a Contractor with considerable expertise and experience in the following types of construction:

- Movable bridges experience
- Railroad experience
- Catenary work
- In-water work
- Deep Foundations
- High Tower Transmission work

In addition, ConnDOT will value the Contractor's ability to manage complex projects, manage subcontractors including DBE firms, and manage and execute a significant amount of "self-performed" work for this type of project.

An important feature of the CM/GC process is collaboration and cooperation. To foster that collaboration, ConnDOT will require that the key staff members of the Contractor, the Designer, and the PM Consultant be co-located in the same office; that location will be determined as this procurement process evolves.

SELECTION PROCESS: ConnDOT will use a two-step process to select the CM/GC, which is essentially a modified Quality-Based Selection with an added price component. ConnDOT is committed to a fair and thorough selection process; as such, a Selection Committee will be established, and they will follow ConnDOT procedures to ensure consistency in the evaluations.

First, ConnDOT will issue a Request for Qualifications (RFQ) to which the Proposers will respond by submitting their Statement of Qualifications (SOQ). The ConnDOT Selection Committee, based on the review of the SOQ's, will determine a short list to advance in the selection process. Second, ConnDOT will issue a Request for Proposal (RFP) to the shortlist, to which the Proposers will respond by submitting a Technical Proposal and a Price Proposal. The Selection Committee will review the Technical Proposals and will host an interview. Based on the evaluations of the Technical Proposals and the interview, coupled with a scoring of the Price Proposal, the Selection Committee will recommend the highest rated Proposer with which to enter into a CM/GC contract.

Details of the submittal requirements and the evaluation criteria will be included in the RFQ and RFP. In addition, to ensure fairness and transparency, ConnDOT shall require that potential Conflicts of Interest are identified during the process.

The anticipated procurement schedule for this CM/GC selection is:

- | | |
|-----------------------------|---------|
| • Industry Briefing | 1/14/15 |
| • Issue RFQ | 1/14/15 |
| • Proposers Submit SOQ | 2/04/15 |
| • Issue RFP | 2/25/15 |
| • Proposers Submit Proposal | 3/31/15 |
| • Select CM/GC | 5/06/15 |

1.02 WALK BRIDGE PROJECT DESCRIPTION

The New Haven Line Railroad Bridge (Walk Bridge) over the Norwalk River in Norwalk was constructed in 1896. The existing four-span Walk Bridge consists of a rim-bearing swing span and three (3) fixed approach spans. The structure carries four (4) tracks of Metro-North commuter rail and Amtrak as well as freight carriers. Approximately 150 trains per day utilize the structure. The fixed spans consist of eight (8) 15'-0" deep Warren trusses, two (2) per track, while the swing span consists of three (3) planes of double-intersection Warren trusses with stringers and floor beams. Power for the trains is supplied by overhead catenary; in addition, high towers are located on either side of the channel to allow power and signal cables to cross overhead uninterrupted. The immediate vicinity of the bridge site is confined by adjacent electrical high towers, condominiums, a sewer treatment facility, the local marina, and the Norwalk Maritime center (IMAX Theatre and Aquarium).

Over the last several years, the existing swing span has experienced operational issues during span movements that have resulted in rail traffic disruptions. Despite continued rehabilitation measures implemented on the existing swing span, the State of Connecticut has determined that a full replacement of the existing bridge is necessary to provide the safe and long-term reliable performance

of this critical transportation link. This project involves the complete replacement of the existing 1896 bridge superstructure and substructure, using the Construction Manager / General Contractor (CM/GC) process. To improve the reliability of the corridor, the replacement structure will consist of twin double-track structures, with each bridge having independently operated movable spans. Project limits are still being developed. For the purposes of this document the limits are from Osborne Avenue on the East and the Washington Street Bridge on the West.

Due to the critical rail traffic that utilizes the tracks, the construction of the replacement structure will need to minimize impacts to Metro-North and Amtrak services. Additionally, the construction of the new bridge will need to minimize impacts to waterway users. Project construction elements include:

- Overall construction phasing to limit impacts and maintain rail traffic and waterway traffic.
- Removal of existing bridge superstructure, substructure, fender system, and overhead catenary system components, as needed.
- Construction and removal of temporary in-water trestle.
- Installation of new bridge approach substructure and foundation.
- Retrofit or replacement of existing bridge abutments.
- Installation and commissioning of two (2) new movable spans, including all structural, mechanical, electrical, and architectural components.
- Installation of new fixed span approach superstructure.
- Use of Accelerated Bridge Construction techniques.
- Track relocations, as needed, within the project limits.
- Retaining wall and civil-related construction.
- Installation of new overhead catenary system (OCS) and modifications to existing OCS, as necessary.
- Installation of new and modification of existing signal system.
- High tower replacement and transmission line relocation.
- Relocation of other utilities that occupy the rail corridor.
- Marine construction work, including the realignment and adjustment to the channel and new fender system.
- Remediation of hazardous material.

Construction will be in compliance with all Federal, State and local requirements.

This project has a current project scope code, “T”, which represents an amount between \$300,000,000 and \$400,000,000.

1.03 CONNDOT’S GOALS FOR THE WALK BRIDGE PROJECT:

The following are goals identified by ConnDOT for the Walk Bridge Project:

1. Build a professional and collaborative project team among the owner, designer, and contractor using the CM/GC procurement method to deliver the project for ConnDOT.
2. Design and construct the Walk Bridge within the allowable budget.
3. Optimize the schedule to achieve both a high-quality project and early project delivery. Maximize opportunities to use innovative design and construction practices.
4. Maintain public trust and confidence in the project and the CM/GC process. Substantially complete design work by the fall of 2016.

5. Substantially complete construction of the new bridge within a three (3) year period from NTP. Minimize impacts to stakeholders (marine, transit, neighbors).

1.04 MAJOR ELEMENTS OF CM/GC PROGRAM

This section highlights the major elements of ConnDOT's CM/GC program; please note further details of these elements are provided later in this document and/or will be included in the RFQ and RFP documents. For the purpose of this Guidance Document, when referring to the CM/GC entity that ConnDOT is seeking to engage through this procurement process, the term "Proposer" is used; when referring to the CM/GC entity that ConnDOT has selected, the term "Contractor" is used.

GENERAL MANDATORY ELEMENTS

- **CONNDOT RIGHTS** – Throughout this process, both during and after procurement, ConnDOT maintains its right to terminate the CM/GC process in part or in its entirety. ConnDOT also maintains its right to use other methods to deliver the Walk Bridge Project, in part or in whole.
- **SELF-PERFORMANCE** – The Contractor must self-perform no less than fifty percent of the overall contract value.
- **PROJECT MANAGEMENT CONSULTANT** – ConnDOT intends to separately hire a professional Project Management (PM) consulting firm to assist ConnDOT in the overall management of the Walk Bridge Project.
- **INDEPENDENT COST ESTIMATOR** - ConnDOT intends to separately hire an Independent Cost Estimating firm (ICE) that will participate in scope and cost discussions through the design development process. The ICE will independently develop a cost estimate using a "blind bid" process. ConnDOT has determined that the minimum threshold for agreement with the Contractor is that the negotiated GMP must be less than one hundred-ten percent of the ICE's estimate.
- **CO-LOCATION** – Under the terms of the CM/GC contract, the Contractor shall be co-located with key staff from the Design Consultant and the PM Consultant at a location to be determined in Connecticut.

SELECTION OF CM/GC CONTRACTOR

- **SELECTION PROCESS** – The Contractor will be selected using a "best value" Quality-Based Selection process, in which a ConnDOT Selection Committee will evaluate the Proposer's qualifications, technical proposal, interview, and price proposal.
- **PREQUALIFICATION** – The Contractor must be prequalified by ConnDOT in the following categories: The Prime must be prequalified in Class 10 (Major Bridges); the overall team must be prequalified in Class 21 (Railroad Construction) and Class 22 (Railroad Construction Electrical).
- **SUBCONTRACTING PLAN** –As part of the selection and evaluation process, the Contractor will be required to provide a Subcontracting Plan. With the exception of key subcontractors and DBE subcontractors whom the Proposer will identify in the proposal, the Contractor must demonstrate that their subcontractor selection will provide a good-faith, competitively bid process that includes at least three (3) competitive bids. In addition, the Contractor must show that they will not "bid shop" the subcontractors during their selection. Unless a reason is demonstrated, the Contractor will select the low subcontracted bid. Every subcontractor will need to be approved by ConnDOT following normal procedures in accordance with Article

1.08.01 of the Standard Specifications. Further information is available at the ConnDOT website (www.ct.gov/dot) under the Office of Construction section.

- **PRE-CONSTRUCTION PHASE SERVICES – FEE ESTIMATE** - The CM/GC Proposer's Technical Proposal will require an "anticipated pre-construction services" fee estimate. However, unlike CM at Risk project delivery; this projection will NOT be included in the "price component" for the best value determination. The Selection Committee will use the fee estimate information provided by the Proposer to evaluate if the Proposer understands the goals of the project, as the estimate of the pre-construction phase services will help to demonstrate the Proposer's capabilities to manage the pre-construction phase. The provided information is also intended to be used as the basis for ConnDOT to start negotiations of the Pre-construction Services Contract (based on detailing the deliverables and the priorities of the pre-construction services, once the Contractor has received award).

IMPLEMENTATION OF CM/GC SERVICES

- **CONTRACT TYPES** – The Contractor will enter into an overall Master Agreement with ConnDOT, and a Pre-construction Services Contract which will be a professional service-type contract. Upon negotiation of a GMP or Interim GMP, ConnDOT and the Contractor will enter into a standard ConnDOT construction agreement, but with a negotiated Guaranteed Maximum Price in lieu of a bid. The format of these contracts will be included in the RFP stage of this procurement process.
- **PRE-CONSTRUCTION PHASE SERVICES – SCOPE** - Prior to entering into a Pre-construction Services Contract, ConnDOT and the Contractor will collectively agree on the pre-construction phase scope of services with an estimate of the amount of hours that will be needed by each member of the Contractor's team to fulfill the agreed to scope/deliverables for pre-construction services.
- **PRE-CONSTRUCTION PHASE SERVICES – PAYMENT** - Because the Pre-construction Services scope is a relatively small (by cost) overall percentage of the total CM/GC scope, and because the scope of the pre-construction services is expected to fluctuate as ConnDOT requires, the CM/GC version treats the structure of the Pre-construction Services phase in a similar fashion as the typical ConnDOT Consultant Services Contract. Compensation to the Contractor will be made based upon actual hours worked plus a non-negotiable fifty percent multiplier on those hours, with a Contractor certification of those hours and rates. A specific definition of the components of the multiplier will be provided in the RFQ and RFP documents.
- **INTERIM GMP'S** - In lieu of one overall GMP, ConnDOT may elect to proceed by breaking the project into more than one package. The Contractor and ConnDOT will formalize the GMP or Interim GMP contracts through a negotiation process, and will establish the contract amount(s) as a not-to-exceed ceiling. The GMP or Interim GMP will include a contingency that will be established based on, among other things, a risk analysis. ConnDOT and other governmental agencies will be entitled to monitor and audit all project costs should there be a dispute, change, or claim that warrants such action. Each GMP or Interim GMP shall be based on design documents that are approximately ninety percent developed. A GMP or Interim GMP that is in excess of one hundred-ten percent of the ICE's estimate will not be acceptable. The work to start physical construction will be initiated once a GMP or Interim GMP is finalized and a

contract NTP is given by ConnDOT. Compensation for construction services within an Interim GMP will be as follows:

- For Lump-Sum items in the Interim GMP: Paid as a lump-sum.
 - For Allowance items in the Interim GMP: Paid based on the actual expenditures.
 - For Unit Price items in the Interim GMP: Paid based on the field quantity at the agreed upon unit price.
 - Each Interim GMP will include a Schedule of Values (SOV) that may include one or several units of payment. The SOV will be paid based on the approved cost, in accordance with ConnDOT scheduling specifications.
- **UNSUCCESSFUL GMP/INTERIM GMP** – It is expected that the GMP negotiation process will be an iterative process; however, ConnDOT shall not allow it to be an unlimited process. In the event ConnDOT and the Contractor fail to agree upon a GMP or Interim GMP after reasonable efforts, then ConnDOT may proceed with the procurement of that scope by other means. If that occurs:
 1. The Contractor shall lose the right to construct the work related to the failed GMP or Interim GMP and shall not be eligible to re-bid the work. If the Contractor's subcontractors, however, were not significantly involved (as judged solely by ConnDOT) in determining the price for the unsuccessful GMP or Interim GMP negotiation, they shall be eligible to participate in a re-procurement of the work, whether by design/bid/build or any other lawful procurement method selected by ConnDOT.
 2. ConnDOT may re-procure the work related to the unsuccessful Interim GMP by any other lawful procurement method, including design/bid/build.
 3. ConnDOT may terminate all or part of the CM/GC process for Walk Bridge Project and procure the remaining elements of the Project by any other lawful procurement method

1.05 DEFINITIONS

The following definitions will apply to this CM/GC Procurement Guidance Document

Award: ConnDOT's acceptance in writing of the Proposal from the responsible Proposer for the work with the Best Value Score, subject to the execution and approval by ConnDOT of a contract thereof and the provision by the Proposer of performance and payment bonds acceptable to the Commissioner to secure the performance thereof, and to such other conditions as may be specified by the Department of required by law.

Best Value (for CM/GC selection): The highest overall evaluation scoring/value to ConnDOT, considering qualifications, experience, technical approach, and a price component.

Blind Bid Process: Bidding process set up to verify a comparison between all estimates completed by ConnDOT, the Independent Cost Estimator (ICE) and CM/GC. The ICE's estimate is kept hidden or "blind" from the other two groups to maintain integrity in the bidding process. In order to pass the minimum threshold for agreement, the Contractor's GMP or Interim GMP price must be within one hundred-ten percent of the ICE's estimate.

Construction Manager/General Contractor (CM/GC) Contractor: A contractor, or joint venture, under contract with ConnDOT, to perform pre-construction phase and construction phase services. The term CM/GC is also used to describe the project delivery method. The CM/GC Contractor is part of the overall project team consisting of ConnDOT staff, the Design Consultant, the Project Management Consultant, an Independent Cost Estimator (ICE) firm, and a Peer Review Consultant. The Contractor will initially provide services such as plan reviews for constructability, pricing, scheduling, staging, methods, efficiency, material procurement strategies, risk identification/management, and other areas related to the construction of the project. During the construction phase, the Contractor performs the same functions as ConnDOT General Contractors under traditional project delivery methods, and is responsible to construct the project. The Contractor is not the Designer-of-Record at any time during life of the project duration; the Contractor and the Designer-of-Record are contracted separately by ConnDOT. See Section 2 for additional information on task and responsibilities of the CM/GC.

CM/GC Master Agreement: The document agreed to by ConnDOT and the Contractor that sets forth the principal terms, conditions, and their respective rights to perform work with respect to the Walk Bridge Project. This agreement will not include specific scope and compensation terms, but will describe them in general terms and will provide for the process to develop those terms. The CM/GC Master Agreement is supplemented by the following documents, which are intended to be complementary and read together as a complete agreement:

1. Pre-construction Services Agreement.
2. GMP or Interim GMP construction contract and drawings, including the contract standard conditions, construction standard specifications, and construction standard drawings.
3. Contract documents incorporated by reference.

CM/GC (Construction Manager/General Contractor) Process: A procurement process in which ConnDOT selects a Contractor to provide pre-construction and construction phase services.

CM/GC - Request for Qualification (RFQ): The document published by ConnDOT requesting Statements of Qualifications (SOQ's) from prospective CM/GC Proposers. The RFQ contains specific requirements needed for review and consideration by ConnDOT to determine which Proposers will continue in the CM/GC selection process.

Contractor: The CM/GC contractor selected by ConnDOT as a result of this procurement process.

Constructability Review: A process that integrates the Contractor's build/assembly skill sets into the design phase. By active/early involvement, the Contractor provides its expertise and experience, as the design is being finalized, to identify potential problems, provide details, provide clarity, optimize methods, and to evaluate phasing complexity. These evaluations are beneficial in reducing critical schedule delays, reducing requests for information (RFIs), and reducing change orders, and/or construction claims.

Construction Contract: A written agreement between ConnDOT and the Contractor setting forth the obligation of the parties, including the furnishing of labor, equipment, and materials, and defining the basis of payment. The construction contract will be in accordance with the standard ConnDOT construction contract, and will include the information provided as part of the Price Proposal, the Guaranteed Maximum Price (GMP) or Interim GMP, GMP record documentation, any addenda, contract agreement, contract bonds, certificates of insurance, standard specifications, special provisions, project plans, standard drawings, design performance criteria documents, reference documents, engineering

directives, and any supplemental agreements that are required to complete the construction of the work in an acceptable manner, all of which constitute one instrument. The Construction Contract, along with the Master Agreement and the Pre-construction Services Agreement, together make up the “contract” for CM/GC services.

Construction Phase: The time period when the Contractor performs the Construction. The start of the construction phase is documented when the pre-construction phase is complete and/or after the first GMP or Interim GMP is authorized for the specific start of construction work (Notice-to-Proceed).

Construction Phase Multiplier: A fixed fee for the work expressed as a percentage of the total construction cost. The construction phase multiplier will include the Contractor’s profit and the portion of home office overhead (G&A) allocated to the Project. The fixed fee percentage will be used in the Contractor’s estimates and their GMP proposals. The profit component of the construction phase multiplier is to include any bonuses and incentives but excludes all costs associated with direct Project construction activities, including but not limited to risk or contingency. Home office overhead is defined as all auditable costs that are allocated to all of the Contractor’s ongoing projects, including insurance that is maintained by the Contractor as a general cost of doing business. The construction phase multiplier shall not include any field indirect costs or direct costs of the project.

Contingencies:

- **GMP Contingency** - At the sole discretion of ConnDOT, during the finalization of the GMP or an Interim GMP, a certain amount of funds may be approved for inclusion in the Interim GMP or GMP as a *GMP Contingency* amount. This may be earned as an allowance within the Interim GMP and will be well-defined during the GMP or Interim GMP negotiations to tailor specifically to elements of work identified in that particular Interim GMP. The contingency is not guaranteed to be earned by the Contractor.

The GMP Contingency is intended for the following:

- Design changes not represented in construction documents used as the basis of fee (i.e. costs as a result of design changes between ninety percent and one hundred percent completion)
 - Quantity variations
 - Minor design changes
 - Identified risks
 - Shared risk items
- **ConnDOT Contingency** – This is an overall Program budgeting reserve that the ConnDOT establishes and maintains exclusively for its own use.

Cost Estimate Calibration Meetings: As part of pre-construction phase services, the Contractor ConnDOT, the PM Consultant, the Design Consultant, and the Independent Cost Estimator (ICE) will hold regular meetings to plan relevant aspects of the cost estimate organization and break-down for a specific scope of work. This will include a cost estimate narrative, a detailed assessment of the project’s limitations of operations, reconciliation of the quantities, crew sizes, production rates, and material costs, the planned “method of measurement” and “basis of payment”, and a description of the Contractor’s planned “means and methods” for constructing the project scope. The intent of these meetings is to provide common ground for later negotiations between ConnDOT and the Contractor.

Cost Model: A cost accounting tabulation for the construction of the project that is developed by the Contractor prior to development of the Guaranteed Maximum Price (GMP) or Interim GMPs for the program and/or a particular scope within the program. Then Cost Model will be based on the Work Breakdown Structure established by the PM Consultant in the PM Consultant's program budget, and will use the Contractor's proposed software and estimating methodology. The Cost Model will be generated to properly plan how the production-based construction cost estimates will be developed to allow comparison with the PM cost estimate and the independent cost estimates and will be summarized into a ConnDOT approved work-breakdown-structure (WBS).

Critical Path Method Schedule (CPM): The optimal time and cost saving technique for planning, organizing, and scheduling critical construction activities, materials, and work force operations. A comprehensive network approach to manage projects - to be communicated, updated, monitored for all project team members. Additionally, this method can be valuable for evaluation of changes, implementation of efficient delay/recovery efforts, and is the most accepted method when assessing the causes of delays. It is anticipated that ConnDOT will require the Contractor to use Primavera P6 scheduling software for this project; specific requirements will be included in the RFQ and/or RFP.

Design/Bid/Build (D/B/B): The typical bid selection method used by ConnDOT. This is a low-bid selection method in which a design consulting engineer, working for ConnDOT, designs the project. ConnDOT then solicits bids and awards a contract to the lowest responsive and responsible bidder to construct the project.

Designer or Design Consultant: The consulting engineer selected by ConnDOT to develop the final plans, specifications and estimate of quantities for the project. For the Walk Bridge Project, ConnDOT has already procured HNTB as the Design Consultant. HNTB will be the project's Designer-of-Record.

Design Review Team: Representatives from the Contractor, the Designer, and ConnDOT Project Manager with supplemental assistance for technical aspects that may be non-routine and necessary to evaluate the design packages.

Direct Costs: The total of all direct cost for field construction to complete the project, which includes loaded labor rates, permanent materials, construction materials, equipment, and subcontracted work. Direct costs shall not include any contingencies, any allocation of field direct costs, or the Contractor's profit and home office overhead.

Equipment Rate: Includes hourly rental rate, either equipment depreciation for contractor owned equipment or outside rental. Also includes Equipment Operating Expense (EOE) consisting of fuel cost, running repairs, repair labor, and consumable items such as tires, ground wear parts, and cables. Also included is the cost of labor and equipment required for running repairs such as fueling and daily and periodic maintenance. Equipment rates will be in accordance with ConnDOT Standard Specifications Article 1.09.04.

GMP (Guaranteed Maximum Price): The total itemized dollar amount agreed upon between the Contractor and ConnDOT for constructing a specific portion of the project scope – excluding the fee for the pre-construction phase services. It includes, but is not limited to, all direct and indirect contractor costs associated with the construction, contracting, self-performance, and management of the project, including the preparation of the construction schedules, shop drawing preparation, construction labor, material costs, equipment costs, all traffic control, quality testing, survey, replacement of rejected work or materials, all punch-list work, certain public information and coordination costs, all overhead costs,

general condition costs, and fees. The Contractor is required to provide all of the backup estimate detail to ConnDOT as part of the GMP submittal process.

ConnDOT may include multiple construction phases or early work construction packages that will result in the Contractor providing Interim GMP's for each package in the overall Walk Bridge Project Program the summation of which equal the GMP for the whole program.

The GMP cost excludes the fees that are paid for services under the pre-construction services phase, as they will be covered in a separate Pre-construction Services Agreement. The Interim GMPs are typically not subject to price escalation or de-escalation as a result of inflation (time value of money) costs unless specifically negotiated to include that. However, ConnDOT acknowledges the price escalation risk will be included in the Interim GMP price if no clauses are included in the Interim GMP Contracts to allow for it. This issue will be considered on a case-by-case basis as part of GMP Contingency discussions within each Interim GMP. In such instances, an escalation study that is specific to the elements of work may be used as a basis of comparison and setting of the contingency costs for escalation and de-escalation.

Each Interim GMP will include the CM/GC Construction Phase Multiplier, which is a fixed-rate percentage for home office overhead and profit that will be applied to the total of all direct costs, project overhead, and indirect costs.

Once a GMP or Interim GMP is finalized by ConnDOT and the Contractor, ConnDOT will issue a contract Notice to Proceed. Should ConnDOT and the Contractor be unsuccessful in agreeing to an Interim GMP, the Contractor will lose the rights to perform the work associated with that Interim GMP, which will be re-procured using a Design/Bid/Build or any other lawful procurement method selected by ConnDOT. The Contractor will be prohibited from participating on the re-procured work.

See also "Interim GMP".

GMP Record Documentation: GMP Record Documentation consists of the approved GMP, all versions of the GMP updates, and all documents used to generate the GMP including all pricing provided in the Request For Proposal, design documents, directives that were incorporated by reference, narratives, basis statements, addenda, contracts, bonds, certificates of insurance, standard specifications, special provisions, project plans, standard drawings, design performance criteria documents, reference documents, engineering directives, and any supplemental agreements (executed after the approved GMP) that are required to complete the construction of the work in an acceptable manner, all of which constitute one instrument.

Independent Cost Estimator (ICE): An independent cost estimator hired by ConnDOT to perform a series of detailed cost estimates. These estimates will be performed independently of the Contractor and independent of the PM Consultant, and will become an important tool to set up, compare, and approve each of the Interim GMPs. These estimates, showing all quantities (including temporary materials), anticipated production rates, labor prices, material prices, equipment prices are to be generated to demonstrate the direct costs of the project. For a comparison to specialized work, the ICE may also be required to acquire independent subcontractor and material pricing quotations from vendors that will not be working on the project. Additionally, these estimates will generate a cost for all indirect costs such as project management, supervision, field office support, mobilization costs, construction utility costs, insurances, profits, etc. It is expected that these estimates will be held "in the blind" (i.e., not visible to the Contractor) and only used to determine if the proposed GMP for any piece of the work is within one hundred-ten percent of the ICE for recommendation to award. ConnDOT may

elect to have the Contractor provide subcontractor and material pricing to the ICE as part of the estimate reconciliation process.

Indirect Costs: The total of all cost for the contractor's onsite overhead to support the field construction. These include labor costs for project management, supervision, engineering, quality control, survey, safety, indirect equipment maintenance, temporary utilities for the contractor's use, project-specific insurance, testing other than third-party laboratory testing, and field office administration. The material and miscellaneous costs include set-up of project office, small tools, consumables, and supplies, mobilization of personnel and equipment, insurance, and project administration, along with any other labor and equipment costs necessary to maintain temporary facilities and temporary utilities.

Interim GMP: ConnDOT may elect to have the Contractor provide several Interim Guaranteed Maximum Prices for phases or components of the overall Walk Bridge Project Program. At the completion of the project, the summation of the Interim GMPs equals the Guaranteed Maximum Price (GMP). For the purpose of this document, the terms "Interim GMP", "Final GMP", and "GMP" are used interchangeably. See GMP.

Labor Rate: The hourly prevailing wage rate at the time of the GMP or Interim GMP negotiations. The Contractor will be required to provide a detailed breakdown of all cost components forming the total wage rate.

Markup (on subcontracted work): Contractor general condition costs for managing subcontracted work.

Notice-to-Proceed: A written communication issued by the ConnDOT, to the Contractor, authorizing the Contractor to proceed with the work and establishing the date of the commencement of the work.

Peer Review Consultant: A Design Consultant hired by ConnDOT to perform engineering reviews of the design developed by the Design Consultant. For the Walk Bridge Project the Peer Review Consultant is Hardesty & Hanover.

Pre-construction Services (PCS): The activities conducted by the Contractor during the advancement of preliminary design and final design phases. These include, but are not limited to, services such as plan reviews for constructability, pricing, scheduling, staging, methods, efficiency, material procurement strategies, risk identification/management, and other areas related to the construction of the project. The Contractor and ConnDOT will document these in a Pre-construction Services Agreement which will include the terms, scope, schedule, and compensation provisions for the pre-construction services. ConnDOT will issue a NTP to the Contractor for this work; no work shall proceed without the NTP. The Pre-construction Services Agreement, along with the Master Agreement and the Construction Contract, together make up the "contract" for CM/GC services.

Pre-construction Phase Multiplier: During the Pre-construction phase, a multiplier of fifty percent will be added to the Contractor's direct labor costs, based on the actual hours worked and the employee's hourly rate (for direct salary only) to compensate the Contractor for all overhead and profit. No home office overhead costs, or corporate principal or partner salary costs, will be allowed for the pre-construction phase; such costs are considered to be included in the Pre-construction Multiplier, whether the multiplier is high enough to cover the costs or not.

Production-Based Cost Estimate: Otherwise known as “bottoms-up” or “open book” estimates, the Contractor will be required to provide detailed construction cost estimates as the design progresses during the preparation of each GMP, as part of the subcontractor selection process, and as part of any authorized changes to the contract prices. The submission of these Contractor estimates will be in full detail in hard copy and electronic format, and will be considered as an “open book” process with the submission to authorized members of ConnDOT. These estimates are to be provided with details that clearly display all anticipated costs for, labor, material, equipment, profit, fees, overheads, escalation, and anticipated production rates. The CM/GC estimate, the PM Consultant estimate, and the ICE estimate will reflect this level of detail.

Program Manager (PM) Consultant: A separate consultant hired by ConnDOT acting as ConnDOT’s extension of staff, which is tasked to assist ConnDOT in the management, coordination, oversight, and administration of ConnDOT Contracts with the Design Consultant and the Contractor. The PM Consultant is expected to be the lead in developing the overall program budget and schedule, with input from the Designer and the Contractor. In addition, the PM Consultant is expected to take the lead in developing the Risk Register and managing the risk mitigation process, with input from other team members.

Proposer: A team made up of a construction contractor, alone or in Joint Venture, together with key subcontractors that submit a Statement of Qualifications to ConnDOT in response to the RFQ. In addition, if included in the short list, the Proposer will respond to the RFP with a submitted proposal.

Proposal: In response to the ConnDOT issued RFP, the Proposer will submit a Proposal that is made up of two, separately packaged, sections. One section will be the “Technical Proposal”, in which the Proposer addresses the requirements for their technical approach to the work. In addition, the technical portion of the evaluation will include the Proposer Interview. The second section will be the “Price Proposal”, in which the Proposer submits their competitively-priced information in accordance with the RFP. Both portions of the proposal will be used in the evaluation and selection process.

Public Advertisement: ConnDOT will publicly advertise the CM/GC services in numerous print media. It is noted that additional information can be found on the State Contracting Portal (link below):

http://www.biznet.ct.gov/scp_search/BidResults.aspx?groupid=64

In addition, the following link is available for the ConnDOT website, Construction Bidding/Contracts Menu (Contractor Resources page) for ConnDOT prequalification information, Construction Contract Bidding and Award manual, etc.

<http://www.ct.gov/dot/cwp/view.asp?a=2288&q=259258>

Also, the Contractor Resources Main Page (link below) with DBE information can be found at:

<http://www.ct.gov/dot/cwp/view.asp?a=2288&Q=498346>

Request for Proposals (RFP): Following the identification of the shortlisted CM/GC proposers, a Request for Proposal for the project will be issued. The response to the RFP will serve as the basis of ConnDOT’s “best-value” evaluation criteria. The response to the RFP will include a Technical Proposal, an interview, and a Pricing Proposal. The pricing component will survive into the GMP or Interim GMP pricing (for the applicable components of the project).

The technical portion of this RFP is a detailed description of the Proposer's project management and approach. This includes many aspects that demonstrate the Proposer's competencies for the specific project. See Section 3.06 for more details.

Request for Qualifications (RFQ): The first formal step in the CM/GC procurement process, the RFQ is a document that will be issued and responded to by Proposers. The RFQ will detail the submittal requirements by which ConnDOT Selection Committee will evaluate the qualifications of the Proposers, and that evaluation will result in a short list for advancement in this procurement process.

Risk Register: A tool used to document the risk management process, as part of an overall project risk analysis scope of services. The purpose of the Risk Register is to define the risks, document the risks, identify cost and schedule impacts associated with the risks, and produce detailed mitigation plans for the risks.

Selection Committee: Individuals from ConnDOT selected to evaluate and score the CM/GC proposals. ConnDOT will require that all team members receive training on the process prior to serving. The Selection Committee will consist of certain ConnDOT staff, and may also be supported by non-voting advisors, such as other ConnDOT staff and/or consultants. Non-voting member advisors to the committee provide subject matter advice to the rest of the selection committee that is considered to be non-routine to the committee. All committee members and non-voting members will be required to sign a confidentiality statement.

Short-list: The list of Proposers that have been determined by the Selection Committee to advance to the RFP stage of the procurement process, based on the evaluation of the SOQ's. ConnDOT anticipates selecting three (3) Proposers to advance, but reserves its right to select more or fewer.

Shortlisted CM/GC Proposers: The Proposers that received the highest evaluation score ranked by the Selection Committee in response to the Request for Qualifications (RFQ). The most qualified Proposers will receive the Request for Proposals (RFP). ConnDOT intends to select three (3) CM/GC Proposers to receive a Walk Bridge Project RFP, but reserves the right to select more teams, or fewer teams, based on the selection committee's evaluations/scoring.

Statement of Qualifications (SOQ): The document submitted by the Proposers in response to ConnDOT's Request for Qualifications; this is the document that will be evaluated by the Selection Committee in determining the short list for advancement in this process.

Subcontracts: As defined by ConnDOT Standard Specifications Form 816.

Surety (Contract) Bond: The security furnished with each GMP or Interim GMP to guarantee that the Contractor will enter into the contract amendment if its GMP or Interim GMP is accepted. This will consist of both performance and payment bonds equal to the full value of the construction of that scope of work.

Value Engineering (VE): A function-oriented, systematic, team approach to add customer value to a project, program, facility, system or service. During the pre-construction phase, the CM/GC will be required to participate in the formal Value Engineering workshop as well as any other less formal value engineering services which are expected to be led by ConnDOT team. Additionally, provisions will be

included in the GMP or Interim GMP contracts (similar to the Article 1.09.02 of ConnDOT Standard Specifications Form 816) for CM/GC Value Engineering Proposals.

Unit Price: A summarized price for a component of the work. A unit price does not reveal the cost break-down of labor, materials, equipment, and/or any other indirect/mark-up costs that are anticipated to complete the work.

1.06 GENERAL OVERVIEW OF CM/GC RESPONSIBILITY AND PROJECT DELIVERY

ConnDOT CM/GC evaluation process is designed to ensure that ConnDOT selects the Contractor team that is best suited with the necessary skills, personnel, resources, systems, and experience to provide valuable input to the design and to manage the work in a manner that reduces the disruption to the travelling public and results in a high-quality project. During the pre-construction phase, the Contractor will engage in detailed discussions with the ConnDOT team over key constructability issues, contract packaging, phasing of the work, and transit operations - thereby reducing the risk that those issues would impact the project during construction. The Contractor will be contractually responsible for price, schedule and quality during construction. In addition, Proposers will be encouraged to indicate their abilities to utilize accelerated and innovative construction techniques for the specific project.

Other important responsibilities/requirements:

- The successful Contractor will be required to self-perform no less than fifty percent of the work, after the value of “specialty” items is deducted. During pre-construction services and development of a GMP or Interim GMP, the CM/GC may be asked to identify work that could be classified as special for ConnDOT’s consideration.
- The Proposer must be qualified by ConnDOT in the classes of work selected for the Walk Bridge Project. ConnDOT has determined that the Proposer’s team must be prequalified in Classification 10 (Major Bridges), 21 (Railroad Construction), and 22 (Railroad Construction Electrical). The prime entity must have Classification 10, while the prime and/or key subcontractors must have Classifications 21 and 22.
- The Proposer must have completed one or more movable bridges of similar scope and complexity with its own forces.
- All subcontractors are required to be approved by the ConnDOT in accordance with ConnDOT Standard Specifications Form 816.
- The Contractor will not be performing engineering or environmental analysis, beyond what is normally performed by a general contractor, and ConnDOT’s Design Consultant will remain the Engineer-of-Record.
- The Contractor will be responsible for implementing a DBE Program during the construction phase. The required DBE percentage will be provided in the RFQ document.

The evaluation criteria and scoring system to be used in evaluating and ranking the Proposers will be outlined in the Request for Qualifications and the Request for Proposal (refer to Section 3).

Throughout the Pre-construction Services phase, the Contractor will be providing services such as plan reviews for constructability, pricing, scheduling, staging, methods, efficiency, material procurement strategies, risk identification/management, and other areas related to the construction of the project. These discussions will include ConnDOT, the PM Consultant, the Contractor, the Design Consultant, and other stakeholders.

As ConnDOT's Design Consultant advances the design, the Contractor will be required to provide "open book" detailed pricing updates and options evaluations as part of their pre-construction phase services. When the design progresses to the thirty percent, sixty percent and ninety percent completion, or at any other significant milestones as determined by ConnDOT, then ConnDOT and the Contractor will begin to develop and reconcile the estimates that will become the basis of a GMP or Interim GMP for construction of that scope of work. The goal at the end of the program will be to have one GMP based upon fully developed documents (and inclusive of all Interim GMPs that proceeded). Assuming the parties agree on the Interim GMP (at minimum, the amount must be less than one hundred-ten percent of the ICE estimate), the Contractor will then function as the general contractor and will be responsible for completing the work on the schedule agreed upon during the Interim GMP discussions. Numerous Interim GMPs may be used for the various phases of the work, but it is ConnDOT's intent to limit the number.

ROLE OF THE CONNDOT'S PROJECT MANAGEMENT (PM) CONSULTANT

The PM consultant will be contracted directly by ConnDOT, separate from the Design Consultant and separate from the Contractor. The PM Consultant will be responsible to act as an extension to ConnDOT's staff in managing and oversight of the design and construction of the Walk Bridge Project. The PM Consultant will be responsible to monitor the overall Walk Bridge Project scope, schedule, and budget. The PM Consultant is expected to develop and maintain the following documents with input from the Contractor and the design team: program schedule, program budget, and risk register. The PM Consultant will also be responsible to develop a reporting plan and provide regular reports to ConnDOT and the FTA. The Contractor will be responsible to work cooperatively and collaboratively with the PM Consultant.

ROLE OF CONNDOT'S DESIGN CONSULTANT

The Design Consultant, HNTB, is contracted directly by ConnDOT, separate from the CM/GC, to develop design documents. Throughout this process, the Design Consultant shall retain the responsibility of Designer-of-Record. Once the Contractor is selected, as part of the pre-construction phase services, the Design Consultant, the PM Consultant, and the Contractor are to work cooperatively with ConnDOT and other stakeholders to optimize the finalization of the design of agreed upon scopes of work and prepare for construction. Once construction commences, the Design Consultant performs the same functions in the traditional Design/Bid/Build approach – in accordance with ConnDOT standard Construction Phase Services scope of work, primarily reviewing shop drawings provided by the Contractor, answering Requests for Information (RFI), reviewing submittals, etc.

ROLE OF FTA

FTA provides funding oversight of the project at various stages, including planning, design, and construction. FTA reserves the right to perform Procurement System Reviews (PSR) and other project reviews.

ROLE OF THE CONNDOT'S PEER REVIEW CONSULTANT

The Peer Review Consultant, Hardesty & Hanover, is contracted directly by ConnDOT, separate from the Contractor and separate from the Design Consultant as well as the PM Consultant, to independently review the design documents and to provide advice to ConnDOT.

ROLE OF CONNDOT'S INDEPENDENT COST ESTIMATE (ICE) CONSULTANT

The ICE Consultant, who shall be procured and contracted separately by ConnDOT, provides an independent cost estimate at thirty percent, sixty percent and ninety percent or any other significant milestones, and at the time of bid for each GMP or Interim GMP. The ICE will be used in comparison with the Contractor's cost proposal to determine if the agreed upon GMP or Interim GMP amounts are fair and reasonable. The ICE Consultant will participate in the cost estimate reconciliation meetings establishing the quantities, means and methods, production rates, and methods of measurement and payment. The estimate provided by the ICE will be held in the blind – that is held confidentially until the Interim GMP for the said scope of work has been accepted.

ROLE OF CONNDOT'S CEI CONSULTANT

The CEI Consultant will provide construction engineering and inspection services and advice to ConnDOT during the construction phase.

CONNDOT CONSULTANTS

The consultants currently engaged with ConnDOT on the execution of this project include:

- Design Consultant – HNTB
- Peer Review Consultant – Hardesty & Hanover
- Accelerated Bridge Construction Consultant – CME
- Procurement Support – Keville Enterprises, Allegro Construction Services
- Project Management Consultant – TBD
- CEI Consultant – TBD
- Independent Cost Estimator - TBD

1.07 CONFIDENTIALITY STATEMENTS/CONFLICT OF INTEREST

The SOQ and Proposal are an integral part of the best-value CM/GC selection process. As such, SOQs and Proposals will be treated as confidential until the time of Contract award or cessation of this procurement. ConnDOT cannot guarantee, however, that the courts or any other governmental agency with jurisdiction over such matters will treat such documents and content as confidential. Further information on confidentiality will be provided in the RFQ and RFP.

The work related to this project may, at any time, raise questions about real or perceived conflicts of interest because of the Proposer's or prospective team member's relationship to other entities or individuals. An unfair competitive advantage may arise if a Proposer engages a firm or individual with knowledge of ConnDOT's deliberations with respect to this project, or knowledge of another team's proposal. Proposers will be required to complete a Conflict of Interest and Unfair Competitive Advantage Certification for itself, and a separate set of forms for its key personnel as part of the SOQ and Proposal. Further information and additional disclosure requirements regarding conflict situations and unfair competitive advantage will be provided in the RFQ and RFP.

1.08 TIME OF PERFORMANCE REQUIREMENTS

The RFP will state the estimated time required for pre-construction services and the overall project durations. The Pre-construction Services agreement will formalize the time required for those services. During the pre-construction phase, the CPM schedule will be prepared and maintained by the PM Consultant, and will include all detailed coordination efforts to optimize the finalization of the design including all Designer activities, remaining permitting/environmental activities, all Contractor activities, all third-party/stakeholder activities, and all of ConnDOT and FTA activities. The interim deadline requirements will also be stated in elapsed days and may be an obligation of the Contractor or ConnDOT. The obligation of ConnDOT to complete specific submittal reviews, in accordance with the minimum requirements of the Connecticut laws, will also be included in the project schedule.

Each Interim GMP will state a time period in which the construction scope is to be delivered. Time of performance requirements that will be provided will be stated in elapsed consecutive calendar days from the date identified as the contractual notice-to-proceed. In this way, changes in the schedule to solicit, receive, evaluate, select, and award can be changed without unfairly affecting the Contractor's ability to finish the project in a reasonable duration. Once the construction contract commences, the Contractor will be responsible to develop and maintain a project schedule for the construction of the project using a Primavera P6 Critical Path Method (CPM) schedule software. The CPM schedule is to be provided to the ConnDOT, the PM Consultant, and the Design Consultant for review and discussion. These baseline and update schedules shall be in accordance with ConnDOT specifications.

1.09 SELECTION COMMITTEE

The Selection Committee is responsible for reviewing and evaluating Statements of Qualifications (SOQs) submitted by Proposers in response to the RFQ, and the Technical and Price Proposals submitted in response to the RFP, in order to select the Contractor. The Committee will be composed of key ConnDOT staff and will be chaired by a representative of ConnDOT. The responsibility of the Committee is to fairly and thoroughly assess the proposals submitted by Proposers in response to ConnDOT RFQ and RFP. Ultimately, the Committee will be responsible to first develop a short list of Proposers based on the SOQ, then to select the preferred Proposer based on the technical proposal and the interview, as well as the price proposal.

In addition, at ConnDOT's discretion, the Committee may be supported with Technical Advisors, who are non-voting members from ConnDOT or ConnDOT Consultants. The role of the Technical Advisors is to provide "subject matter" advice to the Committee that is considered non-routine. Technical Advisors may be assigned to assist, inform, advise, and make recommendations to the Committee's voting members, who will make their own judgment for the scoring of the proposed material.

2. DETAILED DESCRIPTION OF EVALUATION AND SELECTION OF THE SUCCESSFUL CM/GC

As generally described in the Section 1, the ConnDOT CM/GC procurement/evaluation process is a two-part process. Part One, the response to the RFQ, is the Statement of Qualifications (SOQ). Part Two, the response to the RFP, is the submission of a Technical Proposal and Price Proposal (RFP) followed by an interview. The duration from Advertisement to Selection of a Contractor is anticipated to take approximately four (4) months. The Contractor is selected based on demonstrated qualifications, competency, and competitive pricing. Each of these submissions and steps are part of ConnDOT's "best-value" evaluation criteria.



ConnDOT expects the duration to prepare SOQs to be approximately three (3) weeks from the issuance of the RFQ. See the current anticipated procurement schedule in Section 1.01.

2.01 SUMMARY - EVALUATION AND SELECTION OF THE CM/GC

A scoring matrix will be utilized by the Selection Committee to identify the major categories and the associated points for the scoring system. The scoring sheet will also have a location for a narrative comment summary of strengths and weaknesses as identified by the Selection Committee of each Proposer. The evaluation categories and scoring points (scoring matrix) will be included in the RFQ and RFP.

After selection of the shortlisted Proposers based on their SOQ submittal, and receipt of Proposals based on the RFP, ConnDOT will determine the best-value CM/GC Proposer, taking into account both

the Technical Score and the Price Score. It is important to note that the selection is not necessarily awarded to the Proposer with the lowest price.

Proposers are required to be prequalified for the classes of work, as defined by ConnDOT. As noted previously, ConnDOT intends to require that the Proposers be prequalified in Classifications 10 (Major Bridges), 21 (Railroad Construction), and 22 (Railroad Construction Electrical); however, the formal requirements will be included in the RFQ. That specific prequalification information shall be included by the Proposers in their SOQ. Proposers should take particular note of the prequalification submittal deadline requirements, as the process takes some time for ConnDOT to process; it is ConnDOT's intent to require that the Proposer either be prequalified or have their prequalification submittal received by ConnDOT at the time of the RFQ issuance; it is the Proposer's responsibility to be prequalified prior to ConnDOT shortlisting. With regard to teaming with major subcontractors, the CM/GC is required to meet the ConnDOT Subcontractor approval process, similar to that used on traditional DBB projects.

2.02 CM/GC ADVERTISEMENT

ConnDOT will publicly advertise the RFQ on the State Contracting Portal website, as well as in numerous print media.

2.03 REQUESTS FOR QUALIFICATIONS (RFQ)

ConnDOT will issue the RFQ for the purpose of soliciting qualification information from prospective CM/GC Proposers, and for the purpose of identifying a short list of Proposers that will advance to the second step in the procurement process. The Proposer must submit all of the information and documentation required by the RFQ in the format and order requested. Selection of the most qualified Proposers will be based on the submitted information and materials, information on prior project performance, information obtained from references, information obtained from governmental agencies and entities, information contained within ConnDOT files, and such other information as may be obtained. The Proposer must include all of the materials required in the RFQ. The Proposers must give complete and accurate answers to all questions and provide all of the information requested.

ConnDOT is committed to a fair, thorough process. As such, unauthorized communications or contact between the Proposer, their employees, agents, or other related entities interested in submitting SOQs and ConnDOT, ConnDOT's Consultants, and any other person or entity participating on the Prequalification Committee or Selection Committee with regard to this project will be strictly prohibited.

The RFQ will identify the period of time the Proposers may submit questions and written requests for clarifications during the development of their proposals. All inquiries must be in writing and directed to ConnDOT individuals identified in the RFQ. Answers to all substantive questions will be made available to all RFQ recipients via e-mail; and when appropriate, revisions, substitutions, or clarifications will be issued as addenda to the RFQ.

The Proposer is responsible for assuring that the Statement of Qualifications (SOQ) is delivered on time and to the correct location as identified by ConnDOT. ConnDOT will not accept late submittals, and will accept no responsibility for mislabeled or damaged mail.

ConnDOT reserves the right to:

- At its sole discretion, reject any and all SOQs at any time.
- At its sole discretion, waive discrepancies and informalities in the SOQs.

- At its sole discretion, terminate all or part of the CM/GC procurement process.

2.04 STATEMENT OF QUALIFICATION (SOQ) SUBMISSION REQUIREMENTS

All SOQs submitted must consist of the proper format and number of clearly identified copies of the SOQ, including all required attachments, and be accompanied by a Transmittal Letter, one copy of which shall be signed by an official authorized to legally bind the Proposer's project team and shall be marked "ORIGINAL". The Proposer must review the RFQ for specific submittal requirements. ConnDOT may consider a page limit for the information submitted in response to this RFQ; if adopted, that limit will be included in the RFQ. ConnDOT Prequalification Committee reserves its right to rate any proposal as incomplete that fails to include any information required in the RFQ.

The Proposer must demonstrate their ability to perform the scope of services required, to maintain the project budget and completion date, and to perform the work in a high quality manner consistent with ConnDOT's Standard Specifications Form 816. The demonstration of prior successful completion of projects, in similar scope and magnitude (specifically, movable bridge experience), will be of significant importance in ConnDOT's evaluation. The Proposers will be required to demonstrate prior experience building movable bridges to be considered for this CM/GC procurement. The Proposer must also satisfy the ConnDOT Construction Contractor Prequalification requirements, which are available on the ConnDOT website.

ConnDOT has determined that the Contractor's team for the Walk Bridge Project must be prequalified in accordance with the ConnDOT Bid and Award Manual, in the following ConnDOT Contractor Prequalification Work Classifications:

- GROUP NO. 10 MAJOR BRIDGES – Note that ConnDOT has determined that the prime Contractor, whether alone or in Joint Venture, must meet this prequalification requirement. Also, note that ConnDOT shall be seeking specific experience in the construction of movable bridges.
- GROUP NO. 21 RAILROAD CONSTRUCTION and GROUP NO. 22 RAILROAD CONSTRUCTION ELECTRICAL – Note that ConnDOT has determined that the Proposer shall meet these two requirements either as the prime bidder or by use of a Key Subcontractor.

In addition, the following link is available for the ConnDOT website, Construction Bidding/Contracts Menu (Contractor Resources page) for CTDOT prequalification information, Construction Contract Bidding and Award manual, etc.

<http://www.ct.gov/dot/cwp/view.asp?a=2288&q=259258>

The CM/GC RFQ will include the criteria for the selection process, pre-construction scope of work, project constraints related to traffic, utilities, environment, permitting, right-of-way, and general construction requirements.

The requirements related to conflict of interest and unfair competitive advantage are generally described in Section 1.07 of this document. They will be more fully described in the RFQ.

While the RFQ will include specific criteria for the selection, it is expected that ConnDOT will be seeking SOQ's from Proposers that highlight each team's experience in CM/GC as well as in general contracting

and construction management. The SOQ should explain the Proposer's experience in similar types of construction as expected on the Walk Bridge Project, with a special focus on experience in construction of movable rail bridges over waterways. The SOQ should also describe the Proposer's skills in construction management functions such as scheduling and estimating.

ConnDOT also strongly believes that the successful execution of this project will require a high level of cooperation and collaboration and will be seeking that experience from the Proposers. It is noted that ConnDOT expects to include a formal Partnering process on this project.

2.05 MANDATORY DISCLOSURE FORMS

The Proposers may be directed to provide Mandatory Disclosure forms as part of the SOQ. The Proposer will be advised that the submissions of the Mandatory Disclosure forms identified in the RFQ are not optional. Failure to provide this information will result in the SOQ being deemed Non-responsive. A list of standard ConnDOT forms will be included in the RFQ.

2.06 EVALUATION CRITERIA FOR STATEMENTS OF QUALIFICATIONS (SOQ)

The Statement of Qualifications will be evaluated against the criteria set forth in the RFQ document. The criteria and the selection method are designed to ensure fair competition among the Proposers and to assist the Selection Committee in determining the most qualified Proposers.

The Selection Committee may, as part of this selection process, review the references and other pertinent information and specifically reserves the right to perform due diligence and investigate the prospective Proposer and/or its team.

The Selection Committee intends to short list three Proposers, but may, in its sole discretion, select a higher or lower number, based on the quality of the SOQ submittals. Each of the Proposers selected as the short list will be sent a Request for Proposal and will be invited for an interview. The ConnDOT Selection Committee reserves its right to rate any proposal as incomplete that fails to include any information required in this RFQ.

2.07 REQUEST FOR PROPOSALS (RFP)

The RFP is the second step of the evaluation process and is to be implemented for entities selected as the most qualified Proposers. Two major submittals will be provided by the Proposers during this portion of the CM/GC evaluation – Technical Proposal and Price Proposal. In addition, this phase of the proposal will include an interview with the Proposers. The criteria for the submission, and scoring of the Technical Proposal and Price Proposal, will be included in the RFP document.

The RFP will include, in addition to the evaluation criteria for the selection process, the following information: anticipated pre-construction scope of work; project constraints related to working in and around the operating rail corridor, work in the water, traffic, utilities, the environment and right-of-way; pricing details; and construction requirements. The CM/GC RFP will be typically organized as follows:

- A description of the selection process including the selection process calendar.
- RFP formatting instructions and documentation requirements with associated scoring criteria.
- The Draft CM/GC Master Agreement.
- The Draft Pre-construction Contract, including the agreement, terms and conditions, and scope of work.
- A boilerplate of the Construction Contract agreement, terms and conditions.
- A general description of the Design Consultant's scope of work.
- A general description of the proposed Project Management Consultant's scope of work.
- Oral interview requirements.

The RFP will require two submittal packages, one for the Technical Proposal submission and one for the Price Proposal submission. The submittal date for the Technical and Price Proposals will be identified in the RFP.

The ConnDOT Selection Committee shall first determine whether the proposals are responsible and responsive to the requirements of the RFP. Selection Committee members will evaluate the appropriate components of the Proposals against the criteria contained in the RFP. As required by ConnDOT, the Selection Committee may be assisted by technical advisors. The Selection Committee members will also evaluate the Proposers based on the interviews, in addition to the Technical Proposal and Price Proposal.

The RFP will identify the period of time the Proposers may submit questions and written requests for clarifications during the development of their proposals. All inquiries must be in writing and directed to the ConnDOT individuals identified in the RFP. Answers to all substantive questions will be made available to all RFP recipients via e-mail; and when appropriate, revisions, substitutions, or clarifications will be issued as addenda to the RFP.

ConnDOT will schedule an interview with each Proposer. This interview will provide an opportunity for the Proposers to fortify their Technical Proposal with a presentation, as well as allow the Selection Committee to ask clarifying questions.

The commercial terms and conditions of the contracts between ConnDOT and the Contractor are generally considered standard and are not negotiable. ConnDOT intends to issue a "draft" of the CM/GC Master Agreement, Pre-construction Services Contract, and the Construction Contract, which will show the contract terms in their substantive form, for review and acceptance by the Contractor along with the RFP. Additionally, at ConnDOT's sole discretion, some of the construction terms may be negotiated during the development of a GMP or Interim GMPs based on the overall benefit to the ConnDOT and the Project.

2.08 PRESUBMITTAL CONFERENCE FOR THE REQUEST FOR PROPOSAL

Prior to the RFP due date, a pre-proposal meeting will be held with the Short Listed Proposers, to discuss the project in detail and to clarify any concerns that the Proposers may have. At the discretion of ConnDOT, other project stakeholders may attend this meeting. The meeting is intended to provide a forum for the Proposers to ask questions and to discuss aspects of the Technical Proposal and Price Proposal of the RFP. The ConnDOT will obtain feedback and, at ConnDOT's sole discretion, may amend the RFP requirements.

2.09 TECHNICAL PROPOSAL

The Technical Proposal is intended to demonstrate the Proposer's abilities to meet ConnDOT's goals to successfully execute the Walk Bridge Project specific. The Technical Proposal will provide ConnDOT Selection Committee with an understanding of which Proposer is best prepared to execute the Walk Bridge Project.

While the detailed selection and scoring criteria will be included in the RFP document, it is expected that the Proposer will provide information regarding their management approach to this project (including quality control and project controls); their subcontracting plan (including DBE and AA/EEO requirements); their approach to the pre-construction phase (including their plan to work cooperatively with ConnDOT and designer team); and their approach to the construction phase (including innovative project approach and approach to minimize impacts).

ConnDOT will be seeking a Contractor who will provide superior services in both the pre-construction phase and the construction phase. For anticipated pre-construction phase services, please refer to Section 3 of this document. For anticipated construction phase services, please refer to Section 4 of this document.

2.10 TECHNICAL PROPOSAL EVALUATION PROCESS AND CRITERIA

The Selection Committee will first determine whether the proposals are responsive to the requirements of the RFP. Committee members shall evaluate the appropriate components of the proposals against the criteria contained in the RFP. Following the review of any technical advisors and the qualitative ratings, the Selection Committee will determine if clarification of minor inconsistencies will be required. The Selection Committee will notify in writing each Proposer for which clarifications of their proposal is required in accordance with the schedule contained in the RFP. The Selection Committee may request each Proposer to provide clarifying information only to ensure the committee fully understands the proposal. The Selection Committee will rate any proposal as incomplete that fails to include any information required in the RFP.

The Proposer's response to the Request for Proposal (both the Technical Proposal and the Price Proposal) will be evaluated against the criteria established in the RFP. The criteria and the selection method are designed to ensure fair competition among the prospective Proposers and to assist the Selection Committee in making its best value selection.

The Selection Committee may, as part of this selection process, review the references and other pertinent information, and specifically reserves the right to perform due diligence and investigate the prospective CM/GC Proposer and/or its team.

The Selection Committee intends to interview all prospective CM/GC Proposers.

The Selection Committee will highly rate Proposers who demonstrate their successful approach and execution on past similar projects and who executed innovative construction methods that saved time and money. Highly-rated Proposers will also have provided in-depth, thoughtful approaches and solutions to the technical challenges that they identify in this section.

2.11 PRICE COMPONENT OF THE RFP

ConnDOT has chosen to use a “best value” selection process that includes scoring on both the Technical Proposal and the Price Proposal. ConnDOT has chosen this method because the early Walk Bridge Project design development does not allow for the Walk Bridge Project to be hard bid as part of the CM/GC selection. However, it should be noted that the ConnDOT is interested in selecting a Contractor that provides a highly scored technical approach, as well as a competitive price for the selected price component. Should a Proposer provide a non-winning price score, that Proposer might not necessarily be eliminated and may still be the apparent winning Contractor if they are very competitive on the Technical Proposal (in comparison to the other Proposers).

The Price Proposal is the final step to determine the “best value” score of each of the prospective Proposers. The required Price Proposal will be provided in a sealed envelope, separate from the Technical Proposal, but submitted at the same time as the Technical Proposal. The pricing component is designed to provide competitive pricing for the purpose of selecting the recommended CM/GC entity. The specific pricing requirement will be included in the RFP.

As part of the overall “best value” scoring criteria, the pricing component will be used as a percentage of the total score of the RFP overall. The Technical Proposal and the Price Proposal, as well as the Interview, will be used, in varying weights, to provide the best value score. The specific weighting will be included in the RFP.

2.12 CM/GC INTERVIEWS

The ConnDOT Selection Committee intends to include oral interviews with each of the Proposers as part of the selection process. The interviews will be held separately with each Proposer. At a minimum, the format will include an oral presentation by the Proposer addressing their plan and approach to the project followed by a question and answer session. Besides the Selection Committee members, ConnDOT may include other staff, technical advisors, and project stakeholders to observe the interview.

The oral presentation will not be used to fill in missing or incomplete information that was required in the written proposal. The oral presentation will not be used as an opportunity by the Proposers to improve or supplement their proposals. This step in the selection process will be clearly identified in the RFP.

It is noted that ConnDOT considers the interview to be a key indicator of the ability of the Proposer’s team. As such, the Selection Committee will include scoring points for the interview in their overall evaluation. That scoring criteria will be outlined in the RFP.

Following the Interviews, Selection Committee members shall incorporate their interview score into their overall evaluation scoring. In addition, previously scored components of the Technical Proposal may be revised if the Proposers provide clarification to an area that was included in the RFP but not previously clear to the Selection Committee.

2.13 RECOMMENDATION OF CONTRACTOR

Unless all proposals are rejected, the ConnDOT Selection Committee will recommend the approval of, and the start of contract negotiations with, the Best Value Proposer. As noted previously in this document, ConnDOT shall reserve the right to reject any and all proposal, as well as to waive minor

proposal irregularities. As also noted previously, the “contract” for CM/GC services will be in three parts: the Master Agreement, the Pre-construction Services Agreement, and the Construction Contract(s).

3. ANTICIPATED PRE-CONSTRUCTION SERVICES (DURING DESIGN)

3.01 OVERVIEW OF PRE-CONSTRUCTION SERVICES

The purpose of Section 3 is to highlight the types of services that ConnDOT may be seeking from the Contractor during the pre-construction phase. It is included here to give the Contractors, that are considering putting a team together, an idea of the types of services that might be required on the Walk Bridge Project. The specific requirements and scope elements will be included in the RFQ and RFP.

CM/GC project delivery offers ConnDOT significant benefits by having the Contractor on board during the design phase to provide advice during the design phase to improve the project's cost and schedule, as well as to identify and mitigate risks and impacts. During this process the designer has the ability to modify the design contract drawings, specifications, and requirements, well in advance of the start of construction and with the inclusion of many, if not all, of the Contractors most important recommendations. In other words, instead of developing a design for the "generic contractor", the Designer is able to incorporate this specific Contractor's ideas and suggestions. Among the main expected benefits is a reduction in the amount of change orders during construction, as well as a more efficient way of accommodating the physical construction.

The Contractor will be a part of the overall project team consisting of ConnDOT staff, an Independent Cost Estimator team, a Project Management Consultant, and the original Designer-of-Record. The Contractor will provide services such as plan reviews for constructability, pricing, scheduling, staging methods, efficiency, material procurement strategies, risk identification/management, and other areas related to the construction of the project

ANTICIPATED GENERAL PRE-CONSTRUCTION PHASE SERVICES

It is expected that the CM/GC tasks during the pre-construction services phase will include:

- Collaboration and coordination with ConnDOT, the Project Management Consultant, and the Design Team.
- Advising ConnDOT on ways to gain efficiencies in project delivery, including recommendation of contract packaging options.
- Project planning and construction scheduling.
- Identify potential risks to schedule and cost and ways to manage those risks. The Risk Management Plan will be a collaborative process that will involve all project participants and will include the identification, analysis, planning for and mitigation of allocation, and control of project risks. In addition, once identified, the risk will be monitored and documented. The Contractor will be primarily responsible for identifying construction risks, and shall participate in the establishment of the project's Risk Register, which is a tool used to document the risk management process. The risk analysis process will also be used during the development of the GMP or Interim GMP. The Contractor shall not include risk in the general GMP pricing that is not previously discussed or separately identified and included in the Risk Register. In general, ConnDOT expects risk to be accounted for in three ways: (1) risk that is allocated to the Contractor is included within the Contractor's bid items; (2) risk that is allocated to ConnDOT is identified in the GMP contingency; (3) risk that is to be shared is also identified in the GMP contingency.
- Providing guidance and suggestions to mitigate impact on users.

- Suggesting modifications to the design.
- Constructability studies and identification of construction access and staging areas.
- Value Engineering support services.
- Alternative systems evaluation.
- Options analysis (cost and schedule assessments).
- Early investigative work to analyze the existing conditions (e.g. test pits) to be by work-order request.
- Construction phasing, scheduling, maintenance of rail operations, and maintenance of water and roadway traffic staging to minimize interruption to rail and traffic operations.
- Developing the limitations of operations.
- Developing detailed equipment and material delivery plans.
- Detailed cost estimates and knowledge of marketplace conditions.
- Providing cost estimates at various stages of project development.
- Development of a plan for working with and contracting with utilities in order to facilitate efficient relocations and provisions of service.
- Reconciliation of the Interim GMPs with ConnDOT and the ICE.
- Finalization of the Interim GMPs, with all schedule and cost estimating basis.
- Attend and facilitate meetings as requested by ConnDOT.
- Public outreach.
- Encouraging DBE and Equal Opportunity participation
- Development of a Testing Certification and Startup Plans.

3.02 AWARD OF PRE-CONSTRUCTION SERVICES AND GMP

The selected Contractor will enter into a Master Agreement with ConnDOT that will consist of two phases – each to be initiated with individual Notices-To-Proceed (NTPs) following successful negotiations. The first NTP will be issued to engage Pre-construction Services and, ultimately, the development of Interim GMPs. The form and draft terms of the Pre-construction Services Agreement is intended to be included in the RFP. Proposers are required to name their proposed DBE subcontractors for the Pre-construction services, if any, in their proposal. A second NTP (or series of NTPs) will be issued after the parties agree to an Interim GMP for the selected scope of work. Each subsequent GMP, if any, will also have its own NTP.

As the final design phase evolves, the successful Contractor will be required to provide detailed construction pricing updates and options evaluations, in addition to other required scope elements. During this process, ConnDOT and the Contractor (together with the ICE, Design Consultant, and PM Consultant) shall meet in Estimate Calibration Meetings to advance the pricing. When the design of a scope of work achieves ninety percent completion, ConnDOT and the Contractor will develop a GMP or Interim GMP for construction of that scope.

Assuming the parties agree on the Interim GMP for that scope once design has reached final completion, it is anticipated that some of the Contractor's personnel will shift to full-time construction services while others continue to work on pre-construction services (and some may split their time). At that point, the pre-construction phase services will be reviewed and a reallocation made dividing the Contractor team to the personnel continuing pre-construction services and the personnel dedicated to the delivery of that component or scope of work. For the work included in the Interim GMP that receives a construction NTP, the Contractor will then function like a general contractor and will be

responsible for completing the work on schedule at, or below, the guaranteed maximum price for that scope.

3.03 PRE-CONSTRUCTION FEE

ConnDOT and the Contractor will negotiate a cost reimbursable contract for Pre-construction Services. The scope of work shall include all anticipated assignments for constructability reviews, value engineering, cost estimating and development of GMPs, risk management, options analysis, and all other pre-construction phase services. ConnDOT expects the initial pre-construction services period to last for eighteen (18) to twenty-four (24) months.

The Contractor's pre-construction services will be reimbursed for direct labor, based upon the actual hours worked and the employee's hourly rate (for direct salary only), with a Pre-construction Multiplier of fifty percent applied to the direct labor costs. This multiplier is to compensate the contractor for all overhead and profit type costs, exclusive of specifically identified direct costs that will be further defined in the RFP document. This multiplier will be applied to of all Contractor management and staff labor, and all subcontractor and subconsultant costs. No home office overhead costs, or corporate principle salary costs, or profit will be allowed for the pre-construction phase. Those costs are considered to be included in the Pre-construction Multiplier, whether the multiplier is high enough to cover the costs or not. The only exception to this multiplier will be that certain direct costs – specifically for travel, lodging, and meal costs associated with CM/GC employees, approved in advance by ConnDOT, to perform work away from the co-located project office – will be reimbursed at actual costs as direct expenses. Such travel expenses will be limited, similar to the standard provisions on ConnDOT professional services contracts.

ConnDOT anticipates many of the Contractor staff providing pre-construction services will transition some or all of their time to the management of the construction work. ConnDOT will continue to compensate the Contractor for the individual's pre-construction service efforts. However, compensation for the individual's efforts on the construction contract(s) will be considered in the Interim GMP. ConnDOT and CM/GC will establish a strategy for allocating the labor charges to the appropriate contract when the individual's efforts are in transition.

ConnDOT will require the co-location of key members of the Contractor with the Design Consultant and the PM Consultant during at least the pre-construction phase. Co-location facilitates collaboration among the team members and has been shown to be a key element in the success of past CM/GC projects. The Project office and furniture for the Contractor team will be paid for by ConnDOT. The Contractor will not be required to compensate ConnDOT or the Design Consultant for their share of the Project Office costs. The Contractor may, however, be responsible for their computers, office supplies, and other miscellaneous costs for their employees, as well as for any subcontractors or subconsultants.

ConnDOT and the Contractor will agree to terms of the Pre-construction Services contract and fee. Any required increases to the CM/GC pre-construction scope of work, costs (while still using the fifty percent Pre-construction Multiplier), and time of performance (i.e., duration) will be contracted with supplemental agreements.

The Contractor will not be entitled to recover any lost costs for the actual expenditures for or any lost profits for the costs of the future construction phase services contract should a GMP or Interim GMPs not be successfully agreed upon with ConnDOT for any reason.

The Walk Bridge Project may have more than one interim GMP. In this case ConnDOT and the Contractor will determine a payment structure that allows for some selected staff to continue with the pre-construction services after the first GMP is agreed upon. The basis of the initial pre-construction phase will serve as the basis for this continuation of pre-construction services.

3.04 PRELIMINARY EVALUATION (DESIGN PHASE COOPERATION, COORDINATION, AND COMMUNICATION)

Once an NTP has been issued for the Pre-construction Services contract, the Contractor will provide a preliminary evaluation of ConnDOT's most current project requirements, including a review of all updated drawings, background data, commitments, criteria, priorities, time constraints, and physical and financial limitations. It is expected that this report shall be updated on a regular basis as the design evolves.

The Contractor will be responsible for becoming thoroughly familiar with the work sites, and conditions surrounding the sites.

The Contractor will review other site data such as access, inspection reports, and location of utility services, security, surveys, soils information, and other relevant information.

The Contractor will participate in a series of kick-off meetings with the Project Team to develop a common appreciation of the scope and goals of the Project and to outline how the estimating organization, method of measurement, basis of payment, working limitations, innovative practices, and possible means and methods will be all part of a collective risk mitigation strategy.

A full preliminary evaluation report will be due from the Contractor to ConnDOT soon after the NTP, to be updated regularly thereafter, for the entire pre-construction phase. This report is to contain the development of, and tracking of, risk mitigation initiatives, review of the program CPM schedule developed by the PM Consultant, constructability aspects including site access requirements, a narrative on the means and methods of the critical components of the project, options analysis, and a log of all suggested changes to the design documents, as well as the Contractor's cost estimates for construction, when available. ConnDOT shall, at its discretion, pursue implementation of the Contractor's recommendations.

3.05 CM/GC'S PERFORMANCE AND LIMITATIONS

The Contractor's pre-construction services are not intended to include the performance of design work. ConnDOT's Design Consultant will remain responsible for the Engineering of all aspects related to finalization of the design documents and will remain the Designer-of-Record throughout the construction phase. During the construction phase, the Contractor's responsibilities for design are those typical for ConnDOT general contractor (DBB) services (such as shop drawings, formwork design, temporary support-of-excavation design, and other items of work that specifically include design or performance requirements).

ConnDOT will perform audits in accordance with their standard procedure and Standard Specifications for traditional DBB projects, including review of claims. In addition, audits will be performed in regard to the applicability of the costs presented by the Contractor for the Pre-construction Phase Services. All contract documents, created and maintained by the Contractor, are subject to audit by ConnDOT or appointed designee.

3.06 ADDITIONAL SUPPORT SERVICES

The Contractor will consult with, advise, assist, and provide recommendations to ConnDOT, the PM Consultant, and the Design Consultant on all aspects of the planning, efficiency, innovation, sequencing, pricing, and schedule related aspects of the scope of the Work. The Contractor will also provide recommendations on construction feasibility; actions designed to minimize adverse effects of labor or material shortages; time requirements for procurement, installation and construction completion; and factors related to construction cost including estimates of alternative designs or materials, preliminary budgets and possible economies.

3.07 CM/GC HARMONY/ COLLABORATION

The Contractor will be required to exert every reasonable and diligent effort to assure that all labor employed by the Contractor and its subcontractors shall work in harmony with and be compatible with all other labor being used at all times for the duration of the project.

ConnDOT, the PM Consultant, the Contractor, and the Design Consultant have the common goals of producing a quality project within the budget, maximizing the value of the work to ConnDOT, achieving completion without undue inconvenience to the public, producing the work at a reasonable cost to ConnDOT, and with a reasonable compensation to the Contractor, the PM Consultant, and the Design Consultant. In promoting these goals, the Contractor will cooperate and collaborate with ConnDOT, the PM Consultant and the Design Consultant in performing their pre-construction services. The CM/GC will actively provide input for alternatives, improved methods, and other ways to maximize the quality of the project. The Contractor will maintain constant communication with the PM Consultant, the Design Consultant, and ConnDOT.

As noted elsewhere in this document, in support of the goals of this section, ConnDOT expects to include a formal Partnering process on this project. In addition, the Contractor will be required to co-locate key staff with the Design consultant and the PM Consultant.

3.08 SUBCONTRACTING – INCLUDING AA/EEO AND DBE

The Contractor shall submit a subcontracting plan and shall follow that plan during the implementation of this project. In addition, the Contractor will be required to submit, monitor, and update its AA/EEO plan as well as its DBE program plan. These plans shall be managed throughout both the pre-construction and construction phases of the project. The RFQ and RFP shall establish the program requirements to be followed by the Contractor. Should the Contractor deviate from its stated diverse workforce utilization and approved DBE Program, DBE participation goals, and DBE Subcontracting Plan, CONNDOT shall have the right to find the contractor in default, and to terminate the contract based upon default. The Contractor will be afforded adequate opportunity to remedy a deviation from goals and plan before finding the Contractor in default.

In accordance with the Subcontracting plan submitted with the Proposal, the Contractor is expected to apply their subcontractor selection process and demonstrate a transparent/good-faith effort to a minimum of three competing bidders for each subcontracted items. ConnDOT hereby notes it specifically precludes “bid shopping” of subcontractors. The Contractor will identify their selections during the design process, prior to the GMP finalization, as the team creates a solution that meets schedule, quality, and budget goals. The Contractor is to update the description of the roles/scopes of

each subcontractor as changes occur. The Contractor will provide the appropriate ConnDOT staff with copies of all DBE subcontractor contracts.

The specific DBE criteria, including required percentage and penalties for non-conformance, will be included in the RFQ and RFP documents.

3.09 CHANGES TO THE CM/GC TEAM

The Contractor shall not change or substitute any Key Personnel except due to retirement, death, disability, incapacity, or voluntary or involuntary termination of employment, or as otherwise approved by ConnDOT. Prior written approval of ConnDOT for the change in key personnel must be received by the Contractor before any Key Personnel position is filled with a new or different individual. The Contractor may risk penalties up to, and including termination, for proceeding with replacement of key staff without approval and/or without a suitable replacement. ConnDOT notes that the replacement of proposed Contractor staff will not be viewed favorably by ConnDOT. In addition, ConnDOT reserves the right to remove any member of the Contractor's team due to performance or insubordination, at ConnDOT's sole discretion.

3.10 VALUE ENGINEERING (VE)

During the Pre-construction Phase, the Contractor will participate and provide support in formal Value Engineering studies, following Certified Value Specialist (CVS) standards. ConnDOT shall separately provide a CVS to lead and facilitate the formal VE study. ConnDOT expects the CVS to lead a team that includes the PM Consultant, the Contractor, other consultants, and the Design Consultant. The Contractor will participate in the study and provide recommendations and information to support the generation of a report by the VE Team that will be presented to ConnDOT. Results of the study will be documented in a report that will include an explanation provided for all recommendations from the VE team that are not able to be adopted.

Innovative cost saving concepts developed during the Pre-construction Phase may be incorporated into the respective Interim GMP contract documents at ConnDOT's sole discretion. Cost savings as a result of the Contractor's participation in the VE studies during the pre-construction phase will not be shared.

Regarding the contractor's innovation during the Construction Phase, the CM/GC may submit a Value Engineering Proposal (VEP), which is essentially a contractor-initiated cost reduction Change Order. As noted in ConnDOT Standard Specifications Form 816, the contractor's innovative cost savings during the construction phase are shared with the contractor at fifty percent of the net savings of each proposal. ConnDOT will limit the sharing of the savings to VEPs that reasonably could not have been contemplated or anticipated during the Pre-construction Phase. A benefit of CM/GC contracting is contractor collaboration during the pre-construction phase. Withholding innovative ideas until the construction phase is not viewed favorably and those savings will not be shared.

3.11 RISK ANALYSIS

ConnDOT intends to implement a robust risk analysis and mitigation program on the Walk Bridge Project. ConnDOT considers a project risk to be an uncertain event or condition that, if it occurs, has a negative or positive effect on a project's objectives, cost, schedule, or quality. The PM Consultant will have primary responsibility to develop the risk management plan, and the Contractor shall work proactively and cooperatively with the PM Consultant and the Design Consultant to implement the plan.

The Risk Management Plan will be a collaborative process that will involve all project participants and will include the identification, analysis, planning for and mitigation of allocation, and control of project risks. In addition, once identified the risk will be monitored and documented. The Contractor will be primarily responsible for identifying construction risks, and shall participate in the establishment of the project's Risk Register, which is a tool used to document the risk management process. The purpose of the Risk Register is to define the risks, document the risks, identify cost and schedule impacts associated with the risks, and produce detailed mitigation plans for the risks. Each Risk Register includes the agreement of how ConnDOT and the Contractor define the risks, who is responsible for the risks, and how the risks are to be paid for during construction. An important consideration of the risk analysis by the Contractor is to establish a thorough dialogue and agreement on assigning and allocating risk through various payment terms. The ICE (verifying costs associated with risks), Design Consultant (refining the design to minimize or eliminate the risks), the PM Consultant (overall manager of risk program), and ConnDOT will all play important roles in this process.

The risk analysis process will also be used during the development of the GMP or Interim GMP. The Contractor shall not include risk in the general GMP pricing that is not previously discussed or separately identified and included in the Risk Register. In general, ConnDOT expects risk to be accounted for in three ways: (1) risk that is allocated to the Contractor is included within the Contractor's bid items; (2) risk that is allocated to ConnDOT is identified in the GMP contingency; (3) risk that is to be shared is also identified in the GMP contingency.

The PM Consultant shall be responsible to develop and maintain the Risk Register during the pre-construction phase. Upon successful negotiation of an Interim GMP and after the issuance of a construction NTP, the Contractor shall take over responsibility for the tracking and monitoring of the Risk Register items associated with that scope of work.

3.12 INDEPENDENT COST ESTIMATE

ConnDOT will procure and contract with an Independent Cost Estimator (ICE) that has a demonstrated ability to perform production-based cost estimates. These estimates, showing all quantities (including temporary materials), anticipated production rates, labor prices, material prices, and equipment prices, are to be generated by the ICE at sixty percent, ninety percent, and at completion of design for a particular scope of work, or other major milestones, to demonstrate the direct costs of the project. Additionally, these estimates will generate a cost for all indirect costs such as project management, supervision, field office support, mobilization costs, construction utility costs, insurances, profits, etc. The ICE's detailed cost estimates requirement will be developed and performed independent of the PM Consultant or the Design Consultant, but will be set up in a similar manner to the PM Consultant and Contractor estimates. The estimate prepared by the ICE will be used to set up, compare, and evaluate the Interim GMP amount.

The ICE estimate will be held "in the blind" during the Interim GMP cost estimate reconciliation process. In other words, the ICE estimate will not be shared with the Contractor, but will be used to compare the various iterations of the cost estimate. The ICE cost estimate will be disclosed after the successful or unsuccessful negotiation of the Interim GMP. Per ConnDOT policy, an interim GMP cannot be agreed to if the total cost is greater than one hundred-ten percent of the ICE. ConnDOT will establish protocols and procedures for how the ICE will be held in the blind.

3.13 ENGINEERS ESTIMATE

The ConnDOT GMP process involves three detailed construction cost estimates. ConnDOT will obtain an Engineer's Estimate from the PM Consultant, which will be a detailed, production rate-based construction cost estimate (a.k.a. "bottoms-up-estimate") prior to the estimate calibration meetings (see below) and prior to any GMP reconciliation. This construction cost estimate will be compared to the Contractor's estimate as part of the estimate calibration meetings. The ICE will also prepare an independent construction cost estimate, will participate in the estimator calibration meetings, but will hold their estimate in the blind to be used in the review of the final Interim GMP, after there has been a reconciliation between the ConnDOT and the Contractor. Both of these estimates will be strictly confidential and will be reconciled together, prior to the final steps of the Interim GMP acceptance. In some cases, ConnDOT will be required to assist with the reconciliation process by providing a review of the major variance of each of these estimates. As noted previously, the GMP or Interim GMP must be less than one hundred-ten percent of the ICE in order to be acceptable to ConnDOT.

3.14 ESTIMATOR CALIBRATION MEETINGS

As part of pre-construction phase services, the Contractor, the PM Consultant, the Design Consultant, ConnDOT, and the Independent Cost Estimator will hold regular meetings to determine the cost estimate organization and break-down. An early activity in the GMP estimate development for a scope of work is establishing quantities and production rates. Labor and equipment rates can also be reconciled between the teams during this time frame.

Topics of discussions during a series of cost estimate calibration meetings include the cost estimate narrative, the limitations of operations, the quantities, the planned method of measurement and basis of payment, and a description of the planned means and methods including access to the tracks and to the water. The actual comparison of PM Consultant and Contractor prices occurs at each milestone submittal in development of the Interim GMP. This methodology has been proven beneficial in allowing all parties to first focus on the elements of the cost estimate that are to be better defined before pricing comparisons are made.

At each estimate phase, subcontractors will be solicited to supply bid prices for their respective work by the Contractor. A minimum of three (3) sub-quotes are typically required to be able to make a reasonable comparison that the best "value" was achieved. An analysis will be performed by all estimating teams with "spot" verification and all teams collectively agreed to use the pricing that would be the most beneficial to the project.

3.15 COORDINATION WITH THE DESIGN CONSULTANT AND THE PROJECT MANAGER

ConnDOT has or will contract separately with a PM Consultant and a Design Consultant to provide management and engineering services for the entire project. All communications and submittals by the Contractor to ConnDOT will be issued to or made through the PM Consultant unless otherwise directed by ConnDOT. ConnDOT will establish procedures, consistent with this contract, to be followed by the PM Consultant, the Designer, and the Contractor, and to call periodic conferences, to be attended by the Contractor, and the Contractor's subcontractors, throughout the term of the contract.

3.16 CONTRACTOR REVIEWS

DESIGN DOCUMENTS: The Contractor will meet with the Project Team as required to review the designs as it develops. The Contractor will thoroughly familiarize itself with the evolving documents through the various design phases. The Contractor will routinely conduct constructability and bidability reviews of the drawings and specifications as necessary to satisfy the needs of ConnDOT. The reviews will attempt to identify all discrepancies and inconsistencies in the construction documents especially those related to clarity, consistency, and coordination of work of subcontractors and suppliers.

Upon request by ConnDOT, the Contractor will assist ConnDOT in preparing comparative life-cycle studies of ownership, operating, and maintenance costs for each schematic design alternative considering costs relating to efficiency, usable life, maintenance, energy, and operation.

The Contractor will continuously monitor and document changes in the design that would impact cost or schedule and bring those issues to the attention of the ConnDOT team. The Contractor will also continuously monitor the impacts of these changes on the project schedule and recommend adjustments in the design documents or construction bid packaging to ensure completion of the Project in the most expeditious manner possible. The Contractor will advise and assist the PM Consultant, and represent ConnDOT, if requested, in dealing appropriately with all applicable laws and with local utilities, communications, and other related infrastructure issues, as necessary.

As part of this Design Review Team, the Contractor will provide constructability comments, feasibility and practicality of any proposed means and methods; selected materials, equipment, and labor; material availability; site improvements; earthwork, and foundation considerations; coordination of the drawings and specifications: verification of quantities, etc. The Contractor should also provide cost effective alternatives. In addition, the Contractor will maintain a high focus on risk issues.

CONSTRUCTABILITY REVIEWS: The Contractor will evaluate whether:

- There are any conflicts in the manner in which any materials are designed to be installed (including equipment and site access limitations), and the drawings and specifications are free of conflicts and are configured to enable efficient construction.
- The design has taken into consideration, all efficiency issues concerning interfaces, sequencing and phasing, access and entrance to the site, work restriction, weather restrictions, environmental commitments, laydown and storage of materials, staging of site facilities, construction equipment mobilization, and all other construction efficiency issues.
- Design elements are standardized, and materials chosen are suitable and efficient for the intended use.
- Module/preassembly has been considered and optimized to best facilitate fabrication, transportation, and installation.
- There has been adequate sub-surface investigation to the extent possible to avoid differing site conditions once under construction.

BIDABILITY REVIEWS: The Contractor will check cross-references on drawings and in the specifications, and in general evaluate whether:

- The drawings and specifications are sufficiently clear and detailed to minimize ambiguity and to reduce scope interpretation discrepancies.

- Named materials and equipment are commercially available and are performing well or otherwise, in similar installations.
- The design adequately represents existing conditions.
- Specifications include alternatives in the event a requirement cannot be met in the field.

The results of the bid reviews and the constructability reviews will be provided to ConnDOT by the Contractor in formal, written reports clearly identifying all discovered discrepancies and inconsistencies in the drawings and specifications with notations and recommendations made. The Contractor will regularly meet with the ConnDOT design team to discuss, update, and review these reports.

The Contractor's reviews will be from the Contractor's perspective, and are intended to reduce the number of changes during the construction phase. However, the responsibility for the Drawings and Specifications will remain with the Design Consultant, not the Contractor.

3.17 NOTIFICATION OF VARIANCE OR DEFICIENCY

The Contractor will assist the Design Consultant in ascertaining if the construction documents are in accordance with applicable laws, statutes, ordinances, building codes, rules and regulations. If the Contractor recognizes that portions of the construction documents are conflicting or are at variance with applicable laws, statutes, ordinances, building codes, rules, and regulations, it will promptly notify the Design Consultant and ConnDOT in writing, describing the apparent conflict, variance, or deficiency.

3.18 ALTERNATIVE EVALUATIONS / OPTIONS ANALYSIS – PRIOR TO GMP

The work noted here is in addition to the formal Value Engineering workshops noted elsewhere. During the finalization of design (i.e., from thirty percent to one hundred percent development), the Contractor will routinely identify and evaluate options, using value engineering principles and comprehensive analysis. The Contractor will perform a cost benefit analysis of the viable alternatives/options and submit a report to ConnDOT. ConnDOT, the PM Consultant, and the Contractor will collectively decide which alternatives/options will be incorporated into the Project. The Design Consultant will have full responsibility for the incorporation of the alternatives/options into the drawings and specifications. The Contractor will also include the cost of the chosen alternatives/options into the cost estimate, construction schedule, and any GMP proposals. This process is one of the most significant expectations of the Contractor. ConnDOT will be monitoring the pace and effectiveness of the PM Consultant, the Contractor, and the Design Consultant to generate these innovative/efficient ideas.

Additional design costs related to the proposed changes shall be considered in the cost benefit analysis submitted for acceptance.

3.19 PROJECT MEETINGS

The Contractor, the PM Consultant, ConnDOT, the Design Consultant, and other project team members will meet regularly as the progress of the projects require to review and agree upon detailed construction schedule, critical items, cost and budget related issues, the work performed to date, and to establish the controlling items of work for the upcoming month. As noted previously, ConnDOT will require that the Contractor co-locate in the same office as the Design Consultant and the PM Consultant.

The Contractor will attend additional Project Team meetings which may include, but are not limited to, weekly project management meetings, regular design meetings, project workshops, special project meetings, contract documents rolling reviews and partnering sessions. The Contractor will participate in each meeting, report on the state of the costs estimates, project construction schedule, and constructability reviews, and provide pertinent input when required. The project design meetings will present general project progress, address design options that arise during the design process, and will help to provide input and direction from ConnDOT. Project meetings will be conducted throughout the design portion of the project, to complement the project schedule and design review meetings.

In addition, the Contractor, when requested by ConnDOT, will attend, make presentations and participate as may be appropriate in public agency and community meetings relating to the project. The Contractor will assist the Design Consultant in the preparation of drawings, schedule diagrams, budget charts, and other materials describing the project, when needed for any such meetings.

3.20 “OVER-THE-SHOULDER” REVIEWS

Over-the-Shoulder Reviews are informal reviews of design packages that are intended to provide feedback on the design prior to a milestone submittal. The Design Consultant is responsible for recording the review comments, but formal responses and disposition of comments will not be required. A formal design review process will be used on the milestone submittals, which will require responses and dispositions.

During the design process, the Contractor will assist the PM Consultant and the Designer in “over-the-shoulder” reviews. The Contractor will suggest possible alternatives which could reduce costs and/or shorten the schedule. The Contractor will advise on constructability.

3.21 LONG LEAD ITEMS / SYSTEM PROCUREMENTS

The Contractor will recommend to ConnDOT a schedule for procurement of long-lead time items which will constitute part of the Work as required to meet the Project schedule. These items will be procured by the Contractor upon execution of an Interim GMP contract amendment.

Provisions for materials stored or on hand will be similar to Article 1.09 ConnDOT Standard Specifications Form 816.

The Contractor will recommend a procurement strategy to ConnDOT for the buyout of the signal and communications elements of the project on a competitive basis while providing single system responsibility for these items.

3.22 CONSTRUCTION MANAGEMENT PLAN

The Contractor will prepare and submit a Construction Management Plan (CMP) to ConnDOT. In addition, the CMP will be required to be updated monthly until ConnDOT approval. The CMP will include elements such as:

1. The organizational chart of the Contractor’s team
2. A matrix summarizing each Project Team member’s responsibilities and roles
3. Communications protocol

4. Project milestone dates and the Project Schedule, including the broad sequencing of the design and construction of the project
5. A plan for cost control and monitoring
6. Change management protocol – during pre-construction and construction
7. A listing of important investigations to be undertaken/supplemented
8. Construction staging and access plans
9. Alternate strategies for fast-tracking or phasing the construction
10. A list of possible work segments to be constructed under multiple GMPs and reasons (time savings)
11. Anticipated sub-agreements to be awarded to subcontractors and suppliers for the project construction
12. Quarterly status reports to confirm implementation and compliance with DBE and Workforce Utilization Plan
13. Permitting finalization and compliance strategy
14. Safety and training programs
15. Construction quality control and quality assurance
16. Construction security plan
17. Listing of deliverables that the Contractor and the PM Consultant have included in the pre-construction phase services
18. Risk assessment and monitoring plan
19. Listing of all critical submittals and shop drawings
20. Traffic management plans
21. Schedule management plan
22. Basis methodology for monthly cash flow projections
23. Cost accounting and records retention procedures
24. Public outreach initiatives – with schedule of deliverables/meetings
25. Start up and testing plans

The Contractor will update and add detail to its previous version of the CMP to keep it current throughout the Pre-construction Phase, so that the CMP is ready for implementation at the start of the Construction Phase. The update/revisions will take into account:

1. Revisions in drawings and specifications
2. The Contractor's examination of the results of any additional investigatory reports of subsurface conditions, drawings of physical conditions of existing surface and subsurface facilities and documents depicting underground utilities placement and physical condition, whether obtained by ConnDOT, the Design Consultant, or the Contractor
3. Unresolved permitting issues, and significant issues, if any, pertaining to the acquisition of land and right of way
4. The status of the procurement of long-lead time equipment and materials and the implementation of the signal and communications buyout plan
5. Funding issues identified by ConnDOT
6. Input from the public involvement process

3.23 PROJECT SCHEDULE

During the pre-construction phase, the Contractor will review the program schedule developed by the PM Consultant. The Contractor will develop and respond to "what if" scenarios and will use their

expertise to help optimize the program schedule. As the design evolves, the Contractor will continuously monitor and update the anticipated construction schedule.

3.24 DOCUMENT CONTROL

ConnDOT expects to incorporate an electronic web-based document management system on the Walk Bridge Project. This system will be used to assist in the efficient processing of documentation such as RFI's and Submittals, throughout their workflow steps, as well as to act as an interim filing system. The Contractor will be required to use the document management system during the Walk Bridge Project pre-construction and construction phases.

3.25 TEAM PARTNERING

ConnDOT intends to implement a formal Partnering process on the Walk Bridge Project, using a neutral facilitator to lead the efforts. At the start of the CM/GC contract, all members of the project team will attend an initial partnering meeting involving the PM Consultant, the Design Consultant and subconsultants, the Contractor and subcontractors, and the ConnDOT and other agencies required by the project. The meeting is expected to take place shortly after the Contractor's Notice to Proceed.

The partnering meeting will include:

- Development of common goals for the project.
- Procedures designed to maximize communication, cooperation and collaboration between the PM Consultant, the Design Consultant, the Contractor, and ConnDOT.
- Communication between Design Consultant and the Contractor regarding constructability, value analysis, and other collaborative efforts.
- Schedules for submittals such as staging plans, specifications, cost estimates, and analysis of alternatives.
- A partnering Issue Escalation and Resolution ladder process.
- Public involvement.
- Such other matters as may be appropriate.
- Agreement on a plan to continue the partnering process throughout the project, including regularly scheduled follow-up meetings.

Partnering Meetings are planned for intervals of at least two (2) times per year.

The direct expenses associated with partnering (i.e., facility and facilitator) will be borne by ConnDOT.

3.26 PREPARATION OF GUARANTEED MAXIMUM PRICE (GMP) PROPOSALS

As part of pre-construction phase services, when the construction documents for a scope of work are sufficiently complete to establish a price for the project (or portion of the project) and the estimate reconciliation process is complete, the Contractor will establish and submit a formal Interim GMP proposal to ConnDOT in writing, guaranteeing the maximum price not to be exceeded for the scope of work.

It is repeated here that ConnDOT maintains its right to break out any portion of the work and procure it using other methods, should it be in ConnDOT's interest to do so.

As part of the process to achieve acceptance of an Interim GMP, ConnDOT anticipates that more than one submittal from the Contractor may be required to allow for development, exchanges, work-sessions, estimate calibration meeting, and review time. The Contractor's submittals shall be in full detailed, "open book" format. As noted above, the GMP proposals will be the sum of the anticipated direct cost attributed to the work, plus field indirect costs, along with the Contractor's construction phase multiplier. The direct costs shall not include any contingencies, any spread of field indirect costs, or any profit and home office overhead.

Each GMP or Interim GMP is expected to include certain allowances and a GMP Contingency for changes in the agreed upon scope. If the allowances or GMP Contingency are not fully utilized, the unspent amounts are not earned by the Contractor, and may be later used at ConnDOT's discretion. The Contractor agrees to complete the scope of work for that Interim GMP or the final approved GMP amount (i.e., the contract amount for the construction phase contract) and agrees to be solely responsible for any difference between the actual cost of work and the GMP amount, provided that no extra work orders were previously approved by ConnDOT.

If design changes are required during the review and reconciliation of Interim GMP proposals, ConnDOT will authorize and request the Design Consultant to revise the construction documents to the extent necessary to reflect the agreed-upon assumptions and clarifications contained in the final approved Interim GMP proposal. The Contractor will promptly notify the Design Consultant and ConnDOT if any such revised Interim GMP construction documents are inconsistent and with the agreed-upon assumptions and clarifications. Upon signing of the Interim GMP contract, the Contractor will take full responsibility for the estimate basis and assumptions that were provided.

At the sole discretion of ConnDOT, some construction contract terms may be negotiated for Interim GMP based on the overall benefit to ConnDOT and the Project.

It is not intended that project risk shall be included in the pricing for the GMP or Interim GMP; rather ConnDOT desires that any risk be discussed openly and included in the contingency negotiations (see Section 4.11 Risk Analysis)

Compensation for construction services within an Interim GMP will be as follows:

- For Lump-Sum Items in the Interim GMP: Paid as a lump-sum
- For Allowance items in the Interim GMP: Paid based on the actual expenditures
- For Unit Price items in the Interim GMP: Paid based on the field quantity at the agreed upon unit price

Each Interim GMP will include a Schedule of Values (SOV) that may include one or several units of payment. The SOV will be paid based on the approved cost and resource loaded CPM schedule, in accordance with ConnDOT standard specification.

3.27 MULTIPLE GMPs

One of the main goals of the CM/GC delivery method is to arrive at **cost certainty** prior to starting construction of a scope of work. ConnDOT may seek to start portions of early/critical work by executing a separate amendment to the contract with the Contractor detailing the scopes of work selected to commence before execution of the final guaranteed price amendment. The separate amendment, if elected to be utilized by ConnDOT, will state the sum for that specific scope of work, which will include

the cost of the work, the general conditions, and any fee that has been established as part of the bid or negotiation process.

ConnDOT will consider multiple Interim GMP proposals that meet all the following criteria:

- The implementation of multiple Interim GMPs must be clearly understood by ConnDOT to be in the best interest of the project and ConnDOT.
- The segment of work proposed for construction under a separate Interim GMP will be performed in accordance with all applicable permits and statutes. Additionally, work constructed under an Interim GMP must not affect/impact adjacent areas that do not have all required clearances.
- Use of Interim GMP's on the project must be demonstrated to save time, reduce inconvenience to the travelling public, and/or reduce construction costs.
- The Interim GMPs are within the Walk Bridge Project program budget.

3.28 EXTRA WORK ORDERS / AMENDMENTS TO THE GMP

One of the main benefits of the CM/GC concept is to improve the “completeness” and the accuracy of the final design, as well as to improve the Contractor’s understanding of the work. The most significant benefit of this collaborative team effort is intended to be the reduction of change orders during construction. However, it is understood that like any construction project, a CM/GC project may require some change orders, albeit minimal, to complete the scope of work. Under the CM/GC process, the Construction Contract will include change order provisions. It is anticipated that the change order process will closely follow the standard ConnDOT procedures.

It will be at ConnDOT’s discretion whether a change order is funded through the GMP contingency, the ConnDOT contingency, or some other means.

3.29 UNSUCCESSFUL GMP NEGOTIATION

At the completion of the cost estimate calibration meetings, the Contractor, PM Consultant, and ICE will provide their estimates of probable costs to ConnDOT for evaluation and comparison. The Contractor’s price will be compared to the Independent Cost Estimator’s (ICE) estimate. In the event that the GM/GC proposal is greater than one hundred-ten percent of the ICE, ConnDOT may elect to implement a recovery method at their sole discretion.

RECOVERY METHODS:

1. **Recovery Method 1 - Contractor pricing resubmission** - ConnDOT may allow the Contractor to resubmit their pricing and Interim GMP documentation basis, with the specific goal of reducing the proposal price to an acceptable threshold.
2. **Recovery Method 2 - GMP Estimate Reconciliation Workshop** – ConnDOT may facilitate an estimate reconciliation workshop to evaluate the major variances between the Interim GMP estimates generated by the Contractor and the ICE. All aspects of the GMP documentation and estimate, including basis, production rates, quantities, risk, crews, methods, are to be open for

discussion. The workshop will be limited to three (3) business days or less, and may be extended at the sole discretion of ConnDOT.

UNSUCCESSFUL NEGOTIATIONS AFTER RECOVERY:

In the event ConnDOT and the Contractor fail to successfully negotiate a GMP or Interim GMP, then:

1. The Contractor shall lose the right to construct the work related to the failed Interim GMP and shall not be eligible to rebid the work. Any of the Contractor's subcontractors, however, that were not significantly involved in determining the price for the unsuccessful Interim GMP negotiation, shall be eligible (upon specific approval of ConnDOT) to participate in a re-procurement of the work, whether by design/bid/build or by some other project delivery method.
2. ConnDOT may re-procure the work related to the unsuccessful Interim GMP by any other lawful procurement method.
3. ConnDOT may terminate, in part or in full, the CM/GC process for Walk Bridge Project and procure the remaining elements of the Project by any other lawful procurement method.

ConnDOT will provide written documentation of the reasoning behind the termination of the Interim GMP discussions and will take possession and ownership of all documents produced by the Contractor for that work. In this event, the Contractor will not perform, nor be compensated for any pre-construction services beyond the date of the termination of the Interim GMP discussions.

3.30 CONTINGENCY

GMP Contingency: The GMP Contingency is an allowance that will be tailored to the scope of work for a GMP or Interim GMP that is based on several factors. One example is that the GMP may have been set based on ninety percent design, but some minor changes may have occurred as part of the finalization of the drawings and specifications. Another reason is that an allowance may be set up to cover the possibility of an issue occurring that was identified in the risk analysis. The GMP Contingency will be approved and used at the sole discretion of ConnDOT. The amount of GMP Contingency will be approved by ConnDOT prior to the execution of the Interim GMP. The utilization of any portion of the GMP Contingency will be processed similar to the ConnDOT procedures used for change orders, must first be clearly justified by the Contractor in writing, and must be authorized by ConnDOT. If the GMP Contingency is not fully utilized, the unspent amounts are not earned by the Contractor, but remain with ConnDOT.

The GMP Contingency is intended for the following:

- a) Design changes not represented in construction documents that were used as the basis of the GMP (i.e., costs as a result of design changes between ninety percent and PS&E.
- b) Net quantity overruns for unit priced items, after adjustment for underruns.
- c) Minor design changes.
- d) Other identified risks.
- e) Shared risk Items.

ConnDOT Contingency: The ConnDOT Contingency (a.k.a. Owner controlled) will be an amount determined by ConnDOT and is included in the overall program budget. The purpose is to properly account for potential increased cost due to changes in the work, made at the discretion of ConnDOT,

that were not anticipated by ConnDOT and are beyond the control of ConnDOT and the Contractor at the start of the program. The ConnDOT Contingency is an overall program budgeting reserve that ConnDOT establishes and maintains exclusive from the Contractor.

3.31 NOTICE PROVISIONS

When the Contractor has reason to believe that impacts have, or will, cause a change to the pre-construction phase services agreement that is not accounted for in that scope, it will be the Contractor's responsibility to provide ConnDOT with sufficient advance written notification as defined in the contract, to allow ConnDOT to have reasonable opportunity to avoid such costs.

3.32 PRELIMINARY GMP SCHEDULE

At the time of submission of GMP or Interim GMP proposal, the Contractor will submit a cost and resource loaded schedule, in accordance with ConnDOT specifications, to meet ConnDOT's goals for the substantial completion date of the scope of work under that Interim GMP. The Contractor will plan, schedule and execute all aspects of the work and will be responsible for coordinating its activities with all parties who are directly impacted by the work. The Contractor will document and report all work in accordance with the requirements of the Contract Documents.

3.33 COST ESTIMATES AND ESTIMATE CALIBRATION MEETINGS

Early on in the pre-construction services, the PM Consultant will develop and submit to ConnDOT an overall program budget, including a program Work Breakdown Structure. The Contractor will review and use that information and will develop and submit an overall program Cost Model to ConnDOT for review. The Contractor will review and use all available information regarding the design and scope of the project to develop the model. The cost model will be prepared in a format agreed upon by ConnDOT, PM Consultant, and the Contractor. The purpose of the model is to aid the team in the later development of, and negotiation of, the GMP. The Contractor will be required to generate early construction cost estimates as design progresses and will be required to routinely be an active participant in a series of estimate calibration meetings.

Once the format, Work Breakdown Structure, and overall Cost Model template are approved by ConnDOT, the Cost Model will be populated by the PM Consultant and the Contractor and kept current as the design progresses throughout the Pre-construction phase and as Interim GMPs are developed. The Cost Model will eventually be used to model the complete program costs. The CM/GC will communicate to the Project Team any assumptions made in preparing the Cost Model.

Between milestone estimates, the Contractor will provide and update a construction cost report that identifies the upward or downward movements of costs due to value engineering or scope changes. It will be the responsibility of the Contractor to keep ConnDOT, the PM Consultant and the Design Consultant informed as to the changes in costs relative to previous estimate versions and ConnDOT's overall budget.

As the design progresses, the Contractor will be required to provide a detailed production-based construction cost estimate and a written narrative basis for the scope associated with each Interim GMP. The timeframe for the estimate will be established by ConnDOT based on the size of the scope of the work. The Contractor cost estimates will be submitted to ConnDOT and PM Consultant, but will not be provided to the Independent Cost Estimator until ConnDOT determines it is appropriate to do so.

However, ConnDOT, PM Consultant, and Contractor will work collectively to develop a cost estimate narrative, the limitations of operations, the quantities, the detailed description of the planned method of measurement and basis of payment, and the planned production rates to both the PM Consultant and the Independent Cost Estimator for discussion at what is expected to be a series of *Estimate Calibration* meetings.

The Contractor and the PM Consultant will reconcile any disagreements on the basis of the estimate as part of the reconciliation process. If no consensus is reached; ConnDOT will make the final determination and what will be done as a course of action.

Each cost estimate submitted by the Contractor will be a production based estimate and will be accompanied by backup documentation which will include the following:

- Detailed prices and quantity take-offs, including all calculations to arrive at quantities.
- Material costs, equipment costs, labor costs, full loaded hourly labor rates (including employee benefits, payroll taxes and other payroll burdens).
- The detailed total cost for any portion of the work to be performed by subcontractors. The pricing for subcontractor work shall include subcontractor labor, materials, equipment, and general conditions (including subcontractor bonds and insurance). Subcontractor quotations shall be supported with quantities, qualifiers and assumptions appropriate for the elements being priced. The subcontractor pricing does not need to break out the overhead and profit. (The Interim GMP escrow documents shall contain the selected subcontractor quote obtained through the bid process.)
- Copies of quotations from subcontractors and suppliers.
- Production rates for all operations.
- Transportation and other facilities and services necessary for the proper execution of the work, whether temporary or permanent, and whether or not incorporated or to be incorporated into the work.
- All fixed equipment, site improvements, and utility and equipment installations.
- Contractor Multiplier
- Project overhead, general condition costs, indirect costs.
- GMP Contingencies
- Allocated general and administrative expenses not accounted for in the Contractor Multiplier, such as bonds, non-exempt taxes, and insurances.
- Memoranda, narratives, consultant's reports, and all other information included by the CM/GC to arrive at the price shown in the Cost Model or GMP. Include a list of all assumptions and description and breakdown of all allowances.

The Contractor shall develop detailed bidding information and provide such information to each subcontractor on the list of approved subcontractors and invite each approved subcontractor to submit a bid for the work. The Contractor shall present a list of the bids submitted by approved subcontractors to ConnDOT. The Contractor shall indicate the bidders who are selected to be awarded a subcontract. Should the Contractor decide that the low bidder is non-responsive, or that the Contractor finds reasonable cause not to award to the lowest subcontracted bid, the Contractor will present all detailed findings to ConnDOT and it will be ConnDOT's sole discretion to allow that the next lowest ConnDOT approved subcontractor be awarded the subcontracting bid.

3.34 CONFIDENTIALITY OF COST MODEL AND GMP DOCUMENTATION

The Contractor will be allowed to request that some documents be protected as confidential information to the extent that Connecticut laws allow. Note: typical construction costs estimates, including those that clearly identify anticipated production rates, are not deemed to be proprietary and will not be approved as confidential information.

3.35 NON-COLLUSION

The Contractor will sign and submit a non-collusion certification on a form provided by ConnDOT with each GMP Proposal.

4. ANTICIPATED CONSTRUCTION ADMINISTRATION SERVICES

4.01 CONSTRUCTION PHASE

The purpose of Section 4 is to highlight the types of services that ConnDOT may be seeking from the Contractor during the construction phase. In general, during the construction phase, the Contractor has the responsibility of a general contractor, including the project's construction. This section highlights some construction phase services that are incumbent upon this CM/GC Contractor; it is not intended to be an all-inclusive scope list of construction activities. It is included here to give the Contractors that are considering putting a team together an idea of the types of services that might be required on the Walk Bridge Project. The specific requirements and scope elements will be included in the RFQ and RFP.

During the construction phase of the project, the goal of ConnDOT, PM Consultant, Design Consultant, and the Contractor is to construct the project in accordance with the construction documents, to finish the project sooner than the required completion date, to minimize disruption to the neighborhoods and the traveling public, and if possible, complete the project under budget. The construction phase will begin when all the following have occurred:

- The Contractor and ConnDOT agree on a Guaranteed Maximum Price (GMP) for the entire project or the Interim GMPs for a portion of the construction work.
- The Contractor and ConnDOT execute a construction contract with all current GMP documentation – including estimates, drawing, specifications, requirements, attachments, and addenda.
- ConnDOT issues a written NTP letter for the construction phase of the contract.

The construction phase may begin before all activities of the pre-construction services phase are complete. Whether or not the construction phase begins prior to design completion, the Contractor will remain obligated to complete the previously agreed to scope elements of the pre-construction services contract, unless otherwise approved by ConnDOT.

Construction phase service activities are not to be billed under pre-construction phase services. After execution of an Interim GMP, the pre-construction services for that Interim GMP is considered to have been completed. Compensation for the Contractor's management and administration of the Interim GMP from this time forward will be included in the Interim GMP. No further compensation will be allowed in the Pre-construction Services contract for the work associated with that Interim GMP. The Contractor will continue to be compensated for pre-construction service on other Interim GMP assignments.

ANTICIPATED GENERAL CONSTRUCTION PHASE SERVICES

It is expected that the CM/GC tasks during the construction phase will include:

- Safety oversight for all CM/GC entity and subcontractor staff, as well as for onsite ConnDOT and other stakeholder staff.
- Overall construction phasing to limit impacts and maintain rail traffic and waterway traffic.
- Installation of temporary construction required to build this bridge, such as potential temporary trestles in the waterway.

- Removal of existing bridge superstructure, substructure, fender system, and overhead catenary system components, as needed.
- Installation of new bridge approach substructure and deep foundations.
- Retrofit or replacement of existing bridge abutments.
- Installation and commissioning of 2 new movable spans, including all structural, mechanical, electrical, and architectural components.
- Installation of new fixed span approach superstructure.
- Construction and removal of temporary works such as in-water trestle.
- Track relocations, as needed, within the project limits.
- Retaining wall and civil-related construction.
- Installation of new overhead catenary system (OCS) and modifications to existing OCS, as necessary.
- Accelerated Bridge Construction techniques.
- Installation of new and modification of existing signal system.
- High tower replacement and transmission line relocation.
- Relocation of other utilities that occupy the rail corridor.
- Marine construction work including the realignment and adjustment to the channel and new fender system.
- Continuing to provide project controls services (project scheduling and estimating) as required during construction.
- Working diligently to mitigate any encountered issues not previously identified.
- Processing RFI's in conjunction with the ConnDOT design team.
- Providing Quality Control, including material testing, of all construction materials and processes.
- Providing all documentation to support ConnDOT's processes.
- Providing necessary commissioning services to support turnover of completed facilities and systems to operators.
- Continuing to support public information and outreach.
- Providing all construction in accordance with the terms of the ConnDOT construction contract.

Construction will be in compliance with all federal, state and local requirements.

4.02 SUBCONTRACTORS

The Contractor will be responsible to select and contract with subcontractors approved by ConnDOT. The Contractor must implement the DBE and AA/EEO Workforce plan in accordance with the plans developed and must maintain the established goals through the life of the project. GOALS IN RFQ/P.

4.03 SELF-PERFORMANCE BY THE CM/GC

The Contractor is required to self-perform no less than fifty percent of the work excluding the work performed by specialty subcontractors, if any are so designated by ConnDOT.

4.04 CHANGE ORDERS AND TIME EXTENSIONS

When the Contractor has reason to believe that impacts have, or will, cause a change to the contract that is not accounted for in the GMP, and that could not have been reasonably anticipated during the Contractor's pre-construction phase services, it will be the Contractor's responsibility, to provide ConnDOT with sufficient advance written notification as defined in the construction contract, to allow

ConnDOT to have reasonable opportunity to avoid such costs. No change or claim will be reviewed/allowed unless the Contractor has provided the detailed notice as specified by the construction contract, nor shall it be allowed if existing conditions have been disturbed prior to ConnDOT's ability to investigate the apparent changes.

ConnDOT will process change orders based on the ConnDOT Change Order Guidelines, with consideration being given to modify the payment process approvals to accommodate the CM/GC delivery method.

In considering any request for additional compensation and/or an extension of time as a result of a contract modification, ConnDOT will consider the fact that the project has been developed using the CM/GC project delivery process. As part of this process, the Contractor has had the responsibility to review the contract documents throughout the Pre-construction Phase and to verify the accuracy and completeness of the plans, specifications, and quantities included in the GMP Record Documentation. If the reasons for the requested modification to the contract could have reasonably been foreseen given the Contractor's participation in the Pre-construction Phase, the Contractor will not be entitled to any compensation and/or an extension of time. A determination will be made whether the change of scope will be funded from the GMP Contingency or paid as a change order funded from the ConnDOT Contingency. The use of all contingency must be approved in writing by ConnDOT.

4.05 COMPENSATION

ConnDOT intends to follow the standard ConnDOT payment specifications and procedures, on which compensation for construction work is based.

4.06 MEASUREMENT AND PAYMENT

The method of measurement and the basis of payment, for all quantities installed, will be in accordance with ConnDOT standards. During development and finalization of each Interim GMP, ConnDOT and Contractor will define the method of measure and basis of payment, in accordance with the Schedule of Values to be developed for the work.

4.07 CONTRACTOR AND SUBCONTRACTOR RECORDS

The Contractor, subcontractors, and all suppliers will keep and maintain all books, papers, records, files, accounts, reports, and a copy of the GMP Record Documents with backup data, including electronic data, and all other material relating to the contract and project for five (5) years following completion and acceptance of the work. All of the above material will be made available to ConnDOT and other governmental agencies (such as FTA) for auditing, inspection, and copying and will be produced, upon any dispute or claim that appears to be irreconcilable. The contractor will insert the above requirement in each subcontract, purchase order, and lease agreement and will also include in all subcontracts a clause requiring subcontractors to include the above requirement in any lower-tier subcontract, purchase order, or lease agreement. The Contractor is required to provide the basis of Interim GMP pricing as an escrow document, which may be used to settle disputes and claims. The escrow document requirements will be incorporated into the Interim GMP contract.

4.08 *CONTRACT TERMINATION OR SUSPENSION*

The contracts developed for the execution of the work will include provisions for terminations or suspensions, which will include the following situations:

1. Prior to the execution of an Interim GMP, ConnDOT may terminate the CM/GC Master Agreement or Pre-construction Services Contract at any time without cause.
2. After execution of an Interim GMP, ConnDOT may terminate or suspend Pre-construction or Construction work for cause.
3. After execution of an Interim GMP, ConnDOT may terminate or suspend Pre-construction or Construction work for convenience.